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NATIONAL EDUCATIONAL ASSOCIATION

JOURNAL

OF

PROCEEDINGS AND ADDRESSES

OF THE

THIRTY-FIFTH ANNUAL MEETING

HELD AT

BUFFALO, N. Y., JULY 3-10, 1896

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CHICAGO, ILL.

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CONSTITUTION
OF THE
NATIONAL EDUCATIONAL ASSOCIATION

PRÉAMBLE.

To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States, we, whose names are subjoined, agree to adopt the following

CONSTITUTION.

ARTICLE I.—NAME.

This association shall be styled the NATIONAL EDUCATIONAL ASSOCIATION.

ARTICLE II.—DEPARTMENTS.

Section 1. It shall consist of fifteen departments: First, of School Superintendence; second, of Normal Schools; third, of Elementary Schools; fourth, of Higher Instruction; fifth, of Industrial Education; sixth, of Art Education; seventh, of Kindergarten Instruction; eighth, of Music Education; ninth, of Secondary Education; tenth, of Business Education; eleventh, of Child Study; twelfth, of Physical Education; thirteenth, of Natural Science Instruction; fourteenth, of School Administration; fifteenth, for the Education of Defective Classes; sixteenth, the Library Department; and seventeenth, the National Council of Education.

Sec. 2. Other departments may be organized in the manner prescribed in this constitution.

ARTICLE III.—MEMBERSHIP.

Section 1. There shall be three classes of members, namely, active, associate, and corresponding.

Sec. 2. Teachers and all who are actively associated with the management of educational institutions, including libraries and periodicals, may become active members. All others who pay an annual membership fee of two dollars may become associate members. Eminent Educators not residing in America may be elected by the Directory to be corresponding members. The number of corresponding members shall at no time exceed fifty.

Sec. 3. All persons who have been members of the association for any

two years previous to or including 1895 may be admitted to active membership without payment of the enrollment fee. Any person eligible may become an active member upon application indorsed by two active members, and the payment of an enrollment fee of two dollars and the annual dues for the current year.

All active members must pay annual dues of two dollars, and will be entitled to the volume of proceedings without "coupon" or other conditions. If the annual dues are not paid within the fiscal year, membership will lapse, and may be restored only on payment of the enrollment fee of two dollars and the annual dues for the current year. All life members and life directors shall be denominated active members, and shall enjoy all the powers and privileges of such members without the payment of annual dues.

Associate members may receive the volume of proceedings in accordance with the usual "coupon" conditions as printed on the membership certificate.

Corresponding members will be entitled to the volume of proceedings without the payment of fees or other conditions.

Sec. 4. The names of active and corresponding members only will be printed in the volume of proceedings, with their respective educational titles, offices, and addresses, the list to be revised annually by the Secretary of the association.

ARTICLE IV.—OFFICERS.

Section 1. The officers of this association shall consist of a President, twelve Vice Presidents, a Secretary, a Treasurer, a Board of Directors, a Board of Trustees, and an Executive Committee, as hereinafter provided.

Sec. 2. The Board of Directors shall consist of the President of the National Educational Association, First Vice-President, Secretary, Treasurer, Chairman of the Board of Trustees, and one additional member from each state, territory, or district, to be elected by the association for the term of one year, or until their successors are chosen, and of such Life Directors as are in office.

All past presidents of the association, now living, and all future presidents at the close of their respective terms of office, and the United States Commissioner of Education, shall be life directors of the association. The President of the National Educational Association, First Vice-President, Secretary, Treasurer and Chairman of the Board of Trustees, shall constitute the Executive Committee.

Sec. 3. The elective officers of the association shall be chosen by the active members of the association by ballot, unless otherwise ordered, on the third day of each annual session, a majority of the votes cast being necessary for a choice. They shall continue in office until the close of the annual session subsequent to their election, and until their successors are chosen, except as hereinafter provided.

Sec. 4. Each department shall be administered by a President, Vice-President, Secretary, and such other officers as it shall deem necessary to conduct its affairs; but no person shall be elected to any office of the Association, or of any department, who is not, at the time of the election, an active member of the Association.

Sec. 5. The President shall preside at all meetings of the Association and of the Board of Directors, and shall perform the duties usually devolving upon a presiding officer. In his absence, the first Vice-President in order who is present shall preside; and in the absence of all Vice-Presidents a *pro tempore* Chairman shall be appointed on nomination, the Secretary putting the question.

Sec. 6. The Secretary shall keep a full and accurate report of the proceedings of the general meetings of the association and all meetings of the Board of Direct-

ors, and shall conduct such correspondence as the Directors may assign, and shall have his records present at all meetings of the association and of the Board of Directors. The Secretary of each department shall, in addition to performing the duties usually pertaining to his office, keep a list of the members of his department.

Sec. 7. The Treasurer shall receive, and under the direction of the Board of Trustees hold in safe keeping, all moneys paid to the association; shall expend the same only upon the order of said Board; shall keep an exact account of his receipts and expenditures, with vouchers for the latter, which accounts, ending the 1st day of July each year, he shall render to the Board of Trustees, and, when approved by said Board, he shall report the same to the Board of Directors. The Treasurer shall give such bond for the faithful discharge of his duties as may be required by the Board of Trustees; and he shall continue in office until the first meeting of the Board of Directors held prior to the annual meeting of the association next succeeding that for which he is elected.

Sec. 8. The Board of Directors shall have power to fill all vacancies in their own body; shall have in charge the general interests of the association, excepting those herein intrusted to the Board of Trustees; shall make all necessary arrangements for its meetings, and shall do all in its power to make it a useful and honorable institution. Upon the written application of twenty active members of the Association for permission to establish a new department, they may grant such permission. Such new department shall in all respects be entitled to the same rights and privileges as the others. The formation of such department shall in effect be a sufficient amendment to this constitution for the insertion of its name in Article II., and the Secretary shall make the necessary alterations.

Sec. 9. The Board of Trustees shall consist of four members, elected by the Board of Directors for the term of four years, and the President of the association, who shall be a member *ex-officio* during his term of office. At the election of the Trustees in 1886, one Trustee shall be elected for one year, one for two years, one for three years, and one for four years; and annually thereafter, at the first meeting of the Board of Directors held prior to the annual meeting of the Association, one trustee shall be elected for the term of four years. All vacancies occurring in said Board of Trustees, whether by resignation or otherwise, shall be filled by the Board of Directors for the unexpired term; and the absence of a Trustee from two successive annual meetings of the Board shall forfeit his membership therein. The Board of Trustees thus elected shall constitute the body corporate of the association as provided in the certificate of incorporation under the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, dated the 24th day of February, 1886, at Washington, D. C., and recorded in Liber No. 4, "Acts of Incorporation for the District of Columbia."

Sec. 10. It shall be the duty of the Board of Trustees to provide for safe-keeping and investment of all funds which the association may receive from donations; and the income of such invested funds shall be used exclusively in paying the cost of publishing the annual volume of proceedings of the association, excepting when donors shall specify otherwise. It shall also be the duty of the board to issue orders on the Treasurer for the payment of all bills approved by the Board of Directors, or by the President and Secretary of the association acting under the authority of the Board of Directors; and, when practicable, the Trustees shall invest all surplus funds exceeding one hundred dollars that shall remain in the hands of the Treasurer after paying the expenses of the association for the previous year.

ARTICLE V.—MEETINGS.

Section 1. The annual meeting of the association shall be held at such time and place as shall be determined by the Board of Directors.

Sec. 2. Special meetings may be called by the President at the request of five Directors.

Sec. 3. Any department of the association may hold a special meeting at such time and place as by its own regulations it shall appoint.

Sec. 4. The Board of Directors shall hold their regular meetings at the place and not less than two hours before the assembling of the association.

Sec. 5. Special meetings may be held at such other times and places as the board or the President shall determine.

Sec. 6. Each new board shall organize at the session of its election. At its first meeting a Committee on Publication shall be appointed, which shall consist of the President and the Secretary of the association for the previous year and one member from each department.

ARTICLE VI.—BY-LAWS.

By-laws not inconsistent with this constitution may be adopted by a two-thirds vote of the association.

ARTICLE VII.—AMENDMENTS.

This constitution may be altered or amended at a regular meeting by the unanimous vote of the members present; or by a two-thirds vote of the members present, provided that the alteration or amendment has been substantially proposed in writing at a previous meeting.

BY-LAWS.

1. At each regular meeting of the association there shall be appointed a Committee on Nominations, one on Honorary Members, and one on Resolutions.

2. The President and Secretary shall certify to the Board of Trustees all bills approved by the Board of Directors.

3. Each paying member of the association shall be entitled to a copy of its proceedings.

4. No paper, lecture, or address shall be read before the association or any of its departments in the absence of its author, nor shall any such paper, lecture, or address be published in the volume of proceedings without the consent of the association, upon approval of the Executive Committee.

5. It shall be the duty of the President, Secretary and Treasurer of the association to appoint annually some competent person to examine the securities of the Permanent Fund held by the Board of Trustees, and his certificate, showing the condition of the said fund, shall be attached to the report of the Board of Trustees.

ADOPTED BY THE BOARD OF DIRECTORS.

The establishment of a special fund from surplus receipts, after the expenses of the association have been paid, to be known as the "Emergency Fund," was recommended by the Board of Trustees, submitted to the Board of Directors at Saratoga Springs, N. Y., July 12, 1892, and the following resolution was adopted:

Resolved, That there be established, as soon as the current expenses of the association will warrant, an Emergency Fund not to exceed \$4000. Said fund shall be subject to expenditure by the Board of Trustees in accordance with votes of the Board of Directors at any regularly called meeting. The said fund may be used for the purpose of meeting deficiencies of income of the association, and for such additional investigations and publications as may be determined by said Board of Directors.

ACT OF INCORPORATION.

At a meeting of the Board of Directors of the National Educational Association, held at Saratoga Springs, N. Y., July 14, 1885, the following resolution was passed:

Resolved, That a Committee of Three be appointed to secure articles of incorporation for the National Educational Association, under United States or state laws, as speedily as may be.

N. A. Calkins of New York, Thomas W. Bicknell of Massachusetts, and Eli T. Tappan of Ohio, were appointed such committee.

Under the authority of the resolution quoted above, and with the approval of the committee, and by competent legal advice, the Chairman obtained a

CERTIFICATE OF INCORPORATION.

We, the undersigned, Norman A. Calkins, John Eaton, and Zalmon Richards, citizens of the United States, and two of them citizens of the District of Columbia, do hereby associate ourselves together, pursuant to the provisions of the Act of General Incorporation, Class Third, of the Revised Statutes of the District of Columbia, under the name of the "National Educational Association," for the full period of twenty years, the purpose and objects of which are to elevate the character and advance the interests of the profession of teaching and to promote the cause of popular education in the United States. * * * To secure the full benefit of said act, we do here execute this our certificate of incorporation as said act provides.

In witness whereof, we severally set our hands and seals this 24th day of February, 1886, at Washington, D. C.

NORMAN A. CALKINS. [L. S.]
JOHN EATON. [L. S.]
ZALMON RICHARDS. [L. S.]

Duly acknowledged before Michael P. Callan, notary public in and for the District of Columbia, and recorded in Liber No. 4, Acts of Incorporation for the District of Columbia.

CALENDAR OF MEETINGS.

NATIONAL TEACHERS ASSOCIATION.

- 1857.—PHILADELPHIA, PA. (Organized.)
JAMES L. ENOS, Chairman.
W. E. SHELTON, Secretary.
- 1858.—CINCINNATI, OHIO.
Z. RICHARDS, President.
J. W. BULKLEY, Secretary.
A. J. RICKOFF, Treasurer.
- 1859.—WASHINGTON, D. C.
A. J. RICKOFF, President.
J. W. BULKLEY, Secretary.
C. S. PENWELL, Treasurer.
- 1860.—BUFFALO, N. Y.
J. W. BULKLEY, President.
Z. RICHARDS, Secretary.
O. C. WIGHT, Treasurer.
- 1861, 1862.—No session.
- 1863.—CHICAGO, ILL.
JOHN D. PHILBRICK, President.
JAMES CRUIKSHANK, Secretary.
O. C. WIGHT, Treasurer.
- 1864.—OGDENSBURG, N. Y.
W. H. WELLS, President.
DAVID N. CAMP, Secretary.
Z. RICHARDS, Treasurer.

- 1865.—HARRISBURG, PA.
S. S. GREENE, President.
W. E. SHELTON, Secretary.
Z. RICHARDS, Treasurer.
- 1866.—INDIANAPOLIS, IND.
J. P. WICKERSHAM, President.
S. H. WHITE, Secretary.
S. P. BATES, Treasurer.
- 1867.—No session.
- 1868.—NASHVILLE, TENN.
J. M. GREGORY, President.
L. VAN BOKKELLEN, Secretary.
JAMES CRUIKSHANK, Treasurer.
- 1869.—TRENTON, N. J.
L. VAN BOKKELLEN, President.
W. E. CROSBY, Secretary.
A. L. BARBER, Treasurer.
- 1870.—CLEVELAND, OHIO.
DANIEL B. HAGER, President.
A. P. MARBLE, Secretary.
W. E. CROSBY, Treasurer.

NAME CHANGED TO

NATIONAL EDUCATIONAL ASSOCIATION.

- 1871.—ST. LOUIS, MO.
J. L. PICKARD, President.
W. E. CROSBY, Secretary.
JOHN HANCOCK, Treasurer.
- 1872.—BOSTON, MASS.
E. E. WHITE, President.
S. H. WHITE, Secretary.
JOHN HANCOCK, Treasurer.
- 1873.—ELMIRA, N. Y.
B. G. NORTHROP, President.
S. H. WHITE, Secretary.
JOHN HANCOCK, Treasurer.
- 1874.—DETROIT MICH.
S. H. WHITE, President.
A. P. MARBLE, Secretary.
JOHN HANCOCK, Treasurer.
- 1875.—MINNEAPOLIS, MINN.
W. T. HARRIS, President.
W. R. ABBOTT, Secretary.
A. P. MARBLE, Treasurer.
- 1876.—BALTIMORE, MD.
W. F. PHELPS, President.
W. D. HENKLE, Secretary.
A. P. MARBLE, Treasurer.
- 1877.—LOUISVILLE, KY.
M. A. NEWELL, President.
W. D. HENKLE, Secretary.
J. ORMOND WILSON, Treasurer.
- 1878.—No session.
- 1879.—PHILADELPHIA, PA.
JOHN HANCOCK, President.
W. D. HENKLE, Secretary.
J. ORMOND WILSON, Treasurer.
- 1880.—CHAUTAUQUA, N. Y.
J. ORMOND WILSON, President.
W. D. HENKLE, Secretary.
E. T. TAPPAN, Treasurer.
- 1881.—ATLANTA, GA.
JAMES H. SMART, President.
W. D. HENKLE, Secretary.
E. T. TAPPAN, Treasurer.
- 1882.—SARATOGA SPRINGS, N. Y.
G. J. ORR, President.
W. E. SHELTON, Secretary.
H. S. TARBELL, Treasurer.
- 1883.—SARATOGA SPRINGS, N. Y.
E. T. TAPPAN, President.
W. E. SHELTON, Secretary.
N. A. CALKINS, Treasurer.
- 1884.—MADISON, WIS.
THOMAS W. BICKNELL, President.
H. S. TARBELL, Secretary.
N. A. CALKINS, Treasurer.

- 1885.—SARATOGA SPRINGS, N. Y.
F. LOUIS SOLDAN, President.
W. E. SHELTON, Secretary.
N. A. CALKINS, Treasurer.
- 1886.—TOPEKA, KAN.
N. A. CALKINS, President.
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E. C. HEWETT, Treasurer.
- 1887.—CHICAGO, ILL.
W. E. SHELTON, President.
J. H. CANFIELD, Secretary.
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- 1888.—SAN FRANCISCO, CAL.
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J. H. CANFIELD, Secretary.
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- 1889.—NASHVILLE, TENN.
ALBERT P. MARBLE, President.
J. H. CANFIELD, Secretary.
E. C. HEWETT, Treasurer.
- 1890.—ST. PAUL, MINN.
JAMES H. CANFIELD, President.
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- 1891.—TORONTO, ONTARIO.
W. R. GARRETT, President.
E. H. COOK, Secretary.
J. M. GREENWOOD, Treasurer.
- 1892.—SARATOGA SPRINGS, N. Y.
E. H. COOK, President.
R. W. STEVENSON, Secretary.
J. M. GREENWOOD, Treasurer.
- 1893.—CHICAGO, ILL.
(International Congress of Education.)
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.
- 1894.—ASBURY PARK, N. J.
ALBERT G. LANE, President.
IRWIN SHEPARD, Secretary.
J. M. GREENWOOD, Treasurer.
- 1895.—DENVER, COLO.
NICHOLAS M. BUTLER, President.
IRWIN SHEPARD, Secretary.
I. C. MCNEILL, Treasurer.
- 1896.—BUFFALO, N. Y.
NEWTON C. DOUGHERTY, President.
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NATIONAL EDUCATIONAL ASSOCIATION

OF THE UNITED STATES.

OFFICERS FOR 1895-96.

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N. C. SCHAEFFER, Harrisburg, Pa.	R. H. HALSEY, Oshkosh, Wis.
W. N. SHEATS, Tallahassee, Fla.	T. B. LEWIS, Ogden, Utah.
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See Art. IV., Secs. 9 and 10 of the Constitution.

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H. S. TARBELL	Providence, R. I.	Term expires July, 1897.
ZALMON RICHARDS.....	Washington, D. C.	Term expires July, 1896.
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Massachusetts.....	RAY GREENE HULING.....	Cambridge.
Rhode Island.....	HORACE S. TARBELL.....	Providence.
Connecticut.....	GEORGE B. HURD.....	New Haven.
New York.....	CHARLES R. SKINNER.....	Albany.
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South Atlantic Division.

Pennsylvania.....	CHARLES DE GARMO.....	Swarthmore.
Delaware.....	A. N. RAUB.....	Newark.
Maryland.....	E. B. PRETTYMAN.....	Baltimore.
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Virginia.....	E. C. GLASS.....	Lynchburg.
West Virginia.....	ROBERT A. ARMSTRONG.....	Morgantown.
North Carolina.....	B. SMEDES.....	Raleigh.
South Carolina.....	D. B. JOHNSON.....	Rock Hill.
Florida.....	OSCAR CLUTE.....	Lake City.

South Central Division.

Kentucky.....	JAMES MCGINNIS.....	Owensboro.
Tennessee.....	FRANK GOODMAN.....	Nashville.
Georgia.....	OTIS ASHMORE.....	Savannah.
Alabama.....	F. M. ROOF.....	Birmingham.
Mississippi.....	R. B. FULTON.....	University.
Louisiana.....	WARREN EASTON.....	New Orleans.
Texas.....	H. C. PRITCHETT.....	Huntsville.
Oklahoma.....	D. R. BOYD.....	Norman.
Arkansas.....	JUNIUS JORDAN.....	Little Rock.

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Ohio.....	W. J. WHITE.....	Dayton.
Indiana.....	D. K. GOSS.....	Indianapolis.
Illinois.....	JOHN W. COOK.....	Normal.
Michigan.....	S. EMORY WHITNEY.....	Detroit.
Wisconsin.....	D. D. MAYNE.....	Janesville.
Iowa.....	F. B. COOPER.....	Des Moines.
Minnesota.....	C. B. GILBERT.....	St. Paul.
Missouri.....	JOHN R. KIRK.....	Jefferson City.
North Dakota.....	EMMA F. BATES.....	Bismarck.
South Dakota.....	GEORGE M. SMITH.....	Vermillion.
Nebraska.....	W. H. SKINNER.....	Nebraska City.
Kansas.....	JOHN MACDONALD.....	Topeka.

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Wyoming.....	A. L. PUTNAM.....	Newcastle.
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Idaho.....	F. B. GAULT.....	Moscow.
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NATIONAL EDUCATIONAL ASSOCIATION

OF THE UNITED STATES.

OFFICERS FOR 1896-97.

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See Art. IV., Secs. 9 and 10, of the Constitution.

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NICHOLAS MURRAY BUTLER	<i>Secretary</i>	Columbia University, New York City
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NICHOLAS MURRAY BUTLER	New York City	Term expires July, 1898.
ALBERT G. LANE	Chicago, Ill.	Term expires July, 1899.
J. ORMOND WILSON	Washington, D. C.	Term expires July, 1900.
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See Art. IV., Sec. 2, of the Constitution.

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NEWTON C. DOUGHERTY	<i>First Vice President</i>	Peoria, Ill.
IRWIN SHEPARD	<i>Secretary</i>	Winona, Minn.
I. C. McNEILL	<i>Treasurer</i>	West Superior, Wis.
ALBERT G. LANE	<i>Chairman Board of Trustees</i>	Chicago, Ill.

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See Art. IV., Sec. 2, of the Constitution.

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	ALBERT G. LANE, Chicago, Ill.

Life Directors.

See Article IV., Section 2, of the Constitution.

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BROWN, LEROY D., Santa Monica, Cal.	HARRIS, W. T., Washington, D. C.
BUTLER, NICHOLAS MURRAY, New York City, N. Y.	HUNT, MARY H., Boston, Mass.
CANFIELD, JAMES H., Columbus, Ohio.	JEWETT, A. V., Abilene, Kan.
COOK, E. H., Flushing, N. Y.	LANE, ALBERT G., Chicago, Ill.
DAY, L. W., Cleveland, Ohio.	MARBLE, ALBERT P., New York City, N. Y.
DOUGHERTY, NEWTON C., Peoria, Ill.	MARSHALL, MARCELLUS T., Hyden, Ky.
FAIRCHILD, GEORGE T., Manhattan, Kan.	NORTHROP, B. G., Clinton, Conn.
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GRAHAM, H. A., Ontonagon, Mich.	PHELPS, W. F. St. Paul, Minn.
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11

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 SMART, JAMES H., Lafayette, Ind.
 SOLDAN, F. LOUIS, St. Louis, Mo.

STRATTON, C. C., University Park, Ore.
 TAYLOR, A. R., Emporia, Kan.
 WHITE, CHAS. G., Lake Linden, Mich.
 WHITE, E. E., Columbus, Ohio.
 WILSON, J. ORMOND, Washington, D. C.

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New Hampshire.....	C. C. ROUNDS	Plymouth.
Vermont.....	MASON STONE.....	Montpelier.
Massachusetts.....	CHARLES F. CARROLL.....	Worcester.
Rhode Island.....	GILMAN C. FISHER.....	Pawtucket.
Connecticut.....	GEORGE B. HURD.....	New Haven.
New York.....	A. B. BLODGETT.....	Syracuse.
New Jersey.....	JAMES M. RALSTON.....	Asbury Park.

South Atlantic Division.

Pennsylvania.....	N. C. SCHAEFFER.....	Harrisburg.
Delaware.....	A. H. BERLIN.....	Wilmington.
Maryland.....	HENRY A. WISE.....	Baltimore.
District of Columbia.....	JOHN EATON.....	Washington.
Virginia.....	E. C. GLASS.....	Lynchburgh.
West Virginia.....	J. L. GOODKNIGHT.....	Morgantown.
North Carolina.....	CHARLES D. MCIVERS.....	Greensboro.
South Carolina.....	W. H. HAND.....	Chester.
Florida.....	W. N. SHEATS.....	Tallahassee.

South Central Division.

Kentucky.....	McHENRY RHODES.....	Frankfort.
Tennessee.....	WHARTON S. JONES.....	Memphis.
Georgia.....	EULER B. SMITH.....	Athens.
Alabama.....	F. M. ROOF.....	Birmingham.
Mississippi.....	A. A. KINCANNON.....	Jackson.
Louisiana.....	WARREN EASTON.....	New Orleans.
Texas.....	H. C. PRITCHETT.....	Huntsville.
Oklahoma.....	DAVID R. BOYD.....	Norman.
Arkansas.....	J. H. HINEMON.....	Pine Bluff.

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Michigan.....	S. E. WHITNEY.....	Detroit.
Wisconsin.....	L. D. HARVEY.....	Milwaukee.
Iowa.....	F. B. COOPER.....	Des Moines.
Minnesota.....	C. B. GILBERT.....	St. Paul.
Missouri.....	JOHN R. KIRK.....	Jefferson City.
North Dakota.....	EMMA F. BATES.....	Bismarck.
South Dakota.....	GEORGE M. SMITH.....	Vermillion.
Nebraska.....	FRANK A. BARTON.....	Lincoln.
Kansas.....	JOHN MACDONALD.....	Topeka.

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Wyoming.....	A. L. PUTNAM.....	New Castle.
Colorado.....	J. H. VAN SICKLE.....	Denver.
New Mexico.....	HIRAM HADLEY.....	Albuquerque.
Arizona.....	T. B. COMSTOCK.....	Tucson.
Utah.....	W. R. MALONE.....	Salt Lake City.
Nevada.....	J. E. STUBBS.....	Reno.
Idaho.....	F. B. GAULT.....	Moscow.
Washington.....	MARK W. HARRINGTON.....	Seattle.
Oregon.....	M. G. ROYAL.....	Weston.
California.....	EARL BARNES.....	Stanford University.

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JAMES M. GREENWOOD	<i>Executive Committee</i>	Kansas City, Mo.
WILLIAM E. SHELDON	<i>Executive Committee</i>	Boston, Mass.
WILLIAM F. KING	<i>Executive Committee</i>	Mt. Vernon, Iowa.

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IRWEN LEVISTON.....	<i>Secretary</i>	Omaha, Neb.

School Administration.

H. L. GETZ.....	<i>President</i>	Marshalltown, Iowa.
L. A. SATER.....	<i>First Vice President</i>	Syracuse, N. Y.
W. H. BENNETT.....	<i>Second Vice President</i>	Milwaukee, Wis.
R. L. YAEGER.....	<i>Third Vice President</i>	Kansas City, Mo.
WILLIAM GEORGE BRUCE.....	<i>Secretary</i>	Milwaukee, Wis.

Library.

MELVIL DEWEY.....	<i>President</i>	Albany, N. Y.
J. H. VAN SICKLE.....	<i>Vice President</i>	Denver, Colo.
MISS MARY EILEEN AHERN.....	<i>Secretary</i>	Chicago, Ill.

TREASURER'S REPORT

TO THE

NATIONAL EDUCATIONAL ASSOCIATION

JULY 1, 1895, TO JULY 1, 1896.
MEETING AT DENVER, COLO., 1895.

I. C. McNEILL, Treasurer, in account with the National Educational Association:

DR.

To balance from last report	\$ 61.70
To balance of Emergency Fund in Treasurer's hands.....	300.00
To moneys from Chairman Board of Trustees:	
Balance of Emergency Funds from last report.....	\$ 315.39
Interest on Permanent Funds.....	3,033.59
Copyright, Committee of Ten.....	158.35
Copyright, Committee of Fifteen.....	91.10
Redemption of bond (belongs to Permanent Fund)	300.00
	<hr/> 3,898.43
Memberships collected at Denver	2,256.00
Other cash collections .....	.18
Memberships collected by Secretary	1,262.35
Memberships collected by Treasurer	10.00
Memberships collected by Railroads.....	20,361.25
Memberships collected at Cleveland Meeting Department of Superintendence	340.00
Sale of volumes by Secretary and Clerk of Board of Trustees	193.90
	<hr/>
Total	\$28,683.81

CR.

By preliminary expenses in connection with Denver meeting, July, 1895:	
Printing memberships, J. J. Little & Co. (645)	\$ 85.76
Printing certificates (601)	46.00
President's expenses (603).....	145.88
Treasurer's expenses (600, 606).....	139.19
Secretary's expenses (605, 631)	244.41
Acting Treasurer's special services (644).....	200.00
N. A. Calkins, balance of expenses (578)	75.16
	<hr/> \$ 916.40
By expenses Department Superintendence, Cleveland meeting:	
W. H. Maxwell, President (602)	\$ 102.48
J. M. Greenwood, Treasurer (604)	75.70
	<hr/> \$ 178.18
By expenses incurred during Denver meeting:	
Stenographer for reporting proceedings (608)	\$ 131.50
Treasurer's clerks at Denver, Colorado Springs and Pueblo (607)	914.20

State Managers (609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 646, 657)	766.87	
Departments (621, 622, 623, 624, 625, 626, 627, 628, 629) ..	122.95	
Incidental to Treasury Department (639)	15.43	
Incidental to Joint Agency (643)	5.45	
H. D. Mann & Co., printing signs (638)	4.50	
Telegrams, W. U. T. Co. (634)	26.07	
Telegrams, Postal T. Co. (636)	9.43	
Rubber Stamps (641)	10.10	
President's expenses, telegrams, stenographer, railroad fare, etc. (647)	440.10	
Duplicate memberships refunded (635, 648)	88.00	
Carson-Harper Printing Co., printing, (637, 642)	18.75	
		\$2,553.35
By expenses Committee of Twelve:		
Dec. 2, Henry Sabin, Chairman (651)	\$ 117.55	
Apr. 14, J. A. Phillips (670)	38.25	
Apr. 14, Henry Sabin, Chairman (671)	675.46	
May 5, Henry Sabin, Chairman (680)	13.00	
		\$ 844.26
By permanent investments, Board of Trustees (637, 674, 682, 683, 684, 689, 690, 691, 692):		
Noblesville, Ind., School Bonds.		
5 Bonds at \$1000	\$5,000.00	
2 $\frac{3}{4}$ per cent. premium	137.50	
96 days' interest	65.75	
De Kalb, Ill., School Bonds.		
3 Bonds at \$1000	\$3,000.00	
2 22-100 per cent. premium	66.60	
5 days' interest	2.06	
Expense of shipping bonds	4.35	
Kansas City School District Bonds, due 1901.		
2 bonds at \$1000	\$2,000.00	
4 9-100 per cent. premium	81.80	
Accrued interest and express	33.30	
Chicago School District Bonds.		
2 bonds at \$1000	\$2,000.00	
3 125-1000 per cent. premium	62.50	
Accrued interest	20.66	
Expense	2.50	
		\$12,477.05
By expense printing volumes, Jacksonville proceedings, circulars, and Buffalo memberships:		
Pioneer Press Co. (632, 633, 659, 667, 699, 670)	\$5,878.89	
Jones & Kroeger (652, 661, 685, 698)	252.70	
		\$6,131.59
By expense shipping volumes, etc.:		
United States Express Co. (653, 662, 686)	163.44	
Adams' Express Co. (687, 701)	1,539.44	
		\$1,702.88
		\$ 7,834.47

By expense, officers' salaries:

Secretary Irwin Shepard (655, 668, 703).....	\$1,500.00
Treasurer I. C. McNeill (696)	750.00
Secretary Board of Trustees, Z. Richards (678)	225.00
	<hr/> \$ 2,475.00

By expense, Board of Trustees, stationery, postage, express, rent, traveling, telegrams, etc.:

H. S. Tarbell (665, 681).....	\$ 153.60
N. A. Calkins (650).....	87.04
Ella Calkins, clerical work (677) ...	76.25
A. G. Lane (679)	84.11
Z. Richards (676, 693, 694).....	146.80
	<hr/> \$ 547.80

By expense, Executive Committee, stationery, postage, railroad and sleeping car fares, telegrams, etc.:

President, N. C. Dougherty (704).....	\$ 158.40
First Vice President, N. M. Butler (603, 666).....	159.52
Secretary, Irwin Shepard (654, 660, 688, 669, 702)	780.12
Treasurer, I. C. McNeill (656, 663, 672, 695)	231.41
	<hr/> \$1,329.45

By other expenses:

Rent of vault, Kansas City, Mo. (630).....	\$ 10.00
Fidelity & Deposit Co., Treasurer's bond for \$10,000 (620)	50.00
Letter file, Buxton & Skinner (640).....	7.50
285 copies 'Intelligence,' E. O. Vaile.....	14.25
Stationery, Edwin S. Hall (649).....	6.00
Frank Boland, stenographer (an old account) (658).....	57.12
President, Department Superintendence, L. H. Jones, expense account (664)	46.30
	<hr/> \$ 191.17

Total	\$29,347.13
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SUMMARY:

Total Receipts.....	\$28,683.81
Over-drafts paid by Treasurer.....	663.32
	<hr/>
Total expenditures	\$29,347.13

NOTE.—The numbers in brackets refer to the numbers of the orders issued by the Chairman of the Board of Trustees upon the Treasurer as authority for the payment of bills.

NOTE.—The Union National Bank of Denver passed into the hands of a receiver last July with some of the funds of the Association on deposit. One dividend has been declared, leaving \$527.59 still due.

The Treasurer's report for the year ending July 1, 1896, has been examined and approved.

HORACE S. TARBELL, *Chairman.*

NEWTON C. DOUGHERTY.

A. G. LANE,

NICHOLAS MURRAY BUTLER.

Trustees of the National Educational Association.

TENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES.

To the Board of Directors of the National Educational Association:

By the report of the Board of Trustees for July 1, 1895, the permanent investment of the National Educational Association is shown to have been \$45,000, in the following items:

Mortgage on real estate.....	\$ 3,000.00
School bonds.....	14,737.00
Municipal bonds.....	25,200.00
Cash.....	2,063.00
 Total	 \$45,000.00

Since that time \$2,500 in bonds have matured and been paid. Bonds to the amount of \$14,000 have been purchased, and cash remains in the hands of the Chairman of the Board of Trustees to the amount of \$524.75, making the total amount of the Permanent Fund, at the present date, \$54,961.75, which shows an increase of the Permanent Fund, during the current year, of \$9,961.75. The amount of interest collected during the year was \$3,058.14. The invested fund is located as follows:

With the Nassau Safe Deposit Company, New York.....	\$40,337.00
With the National Bank of the Republic, for collection.....	1,100.00
With Bentley & Hatfield, Washita, Kan.....	1,000.00
In Safe Deposit Vault at Providence, R. I.....	12,000.00
	<hr/> \$54,437.00

Respectfully submitted,

HORACE S. TARBELL, *Chairman.*

NEWTON C. DOUGHERTY.

NICHOLAS MURRAY BUTLER.

A. G. LANE.

Trustees of the National Educational Association.

NOTE:—For the Examiner's certificate and a schedule of securities see Appendix.

JOURNAL OF PROCEEDINGS
OF THE
THIRTY-FIFTH ANNUAL MEETING
OF THE
NATIONAL EDUCATIONAL ASSOCIATION

BUFFALO, N. Y., JULY 7-10, 1896.

FIRST DAY'S PROCEEDINGS.

FIRST SESSION.—TUESDAY AFTERNOON, JULY 7TH.

The association was called to order at 2:30 p. m., Tuesday, July 7, 1896, in the Music Hall, Buffalo, N. Y., by H. P. Emerson, Superintendent of Education, Buffalo, Chairman of the local Executive Committee.

Superintendent Emerson announced that an overflow meeting was being held in the large concert hall adjoining. He then introduced the Right Rev. A. Cleveland Coxe, Episcopal Bishop of Western New York, who invoked the Divine blessing.

Music by the quartet choir of the Delaware Avenue M. E. Church, Buffalo.

Superintendent Emerson spoke words of welcome on behalf of the local Executive Committee. He was followed by the Hon. Edgar D. Jewett, Mayor of Buffalo, who also welcomed the association.

SUPERINTENDENT EMERSON: The president of your association has suggested to me that as three-quarters of our audience are women it would be eminently proper for some woman to take part in these welcoming speeches: He went still further and suggested the name of the woman, and I have the pleasure of introducing to you Dr. Ida C. Bender, Supervisor of Primary Work in the Buffalo Public Schools.

Miss Bender welcomed the Association in behalf of the women teachers of Buffalo.

Superintendent Emerson announced with regret the absence, on account of illness, of the Hon. James O. Putnam, "the old man eloquent," Chancellor of the University of Buffalo, who had been chosen to deliver an address of welcome on behalf of the higher educational

institutions of Buffalo. He then introduced the Hon. Charles R. Skinner, State Superintendent of Public Instruction of New York, who extended a welcome on behalf of the Department of Education of the State of New York.

At this point in the proceedings Superintendent Emerson surrendered the gavel, with introductory remarks, to the President of the National Educational Association, Newton C. Dougherty of Peoria, Ill., who responded to the addresses of welcome.

Hon. W. T. Harris, United States Commissioner of Education, and Professor Earl Barnes, of Leland Stanford Jr. University, Cal., also responded to the addresses of welcome.

President Dougherty announced that Professor Edwin A. Alderman, University of North Carolina, who was appointed to respond for the teachers of the South, was absent on account of sickness.

Dr. William T. Harris, United States Commissioner of Education, addressed the association on "Horace Mann."

Following Dr. Harris' address the audience sang "America."

Addresses on Horace Mann were given by Hon. N. C. Schaeffer, State Superintendent of Public Instruction, Pennsylvania; Hon. Henry Sabin, State Superintendent of Public Instruction, Iowa; F. Louis Soldan, Superintendent of Schools, St. Louis, Mo.; Aaron Gove, Superintendent of Schools, Denver, Colo.; J. M. Greenwood, Superintendent of Schools, Kansas City, Mo., and Wm. A. Bell, Editor of *Indiana School Journal*, Indianapolis, Ind.

Adjourned to 8 p. m.

SECOND SESSION.—TUESDAY EVENING, JULY 7TH.

The convention was called to order at 8 p. m. by President N. C. Dougherty of Illinois.

Music by the Principals' Male Quartet of Chicago.

President Dougherty delivered the annual presidential address: Subject, "Do the Public Schools Meet Reasonable Expectations?"

Solo by Mrs. Clara Barnes Holmes of Buffalo.

Dr. Nicholas Murray Butler, of Columbia University, addressed the association on "Democracy and Education."

Announcements by the Secretary.

Adjourned to 9:45 a. m., July 8th.

SECOND DAY'S PROCEEDINGS.

THIRD SESSION.—WEDNESDAY MORNING, JULY 8TH.

The session was called to order at 9:45 a. m., in Music Hall, by President Dougherty.

An overflow meeting was held in Concert Hall, presided over by Dr. John W. Cook of Illinois.

Invocation by the Rev. W. J. McKittrick, Pastor of Calvary Presbyterian Church, Buffalo.

Music by the Principals' Male Quartet of Chicago.

President Dougherty appointed the following committees:

COMMITTEE ON NOMINATIONS.

F. LOUIS SOLDAN, OF MISSOURI, CHAIRMAN.

Maine.....	W. J. Corthell.	Oklahoma.....	D. R. Boyd.
New Hampshire.....	C. C. Rounds.	Arkansas.....	J. H. Hinemon.
Vermont.....	Alfred Turner.	Ohio.....	O. T. Corson.
Massachusetts.....	A. C. Bates.	Indiana.....	W. A. Bell.
Rhode Island.....	W. B. Jacobs.	Illinois.....	W. L. Steele.
Connecticut.....	Charles W. Dean.	Michigan.....	C. G. White.
New York.....	A. S. Downing.	Wisconsin.....	John A. Diedricksen.
New Jersey.....	H. Brewster Willis.	Iowa.....	Henry Sabin.
Pennsylvania.....	Charles W. Lose.	Minnesota.....	C. M. Jordan.
Delaware.....	C. D. McFee.	North Dakota.....	W. E. Hicks.
Maryland.....	Henry Wise.	South Dakota.....	A. H. Avery.
District of Columbia.....	W. T. Harris.	Nebraska.....	Chas. G. Pearse.
Virginia.....	E. C. Glass.	Kansas.....	W. M. Davidson.
West Virginia.....	J. L. Goodknight.	Montana.....	R. G. Young.
North Carolina.....	L. D. Howell.	Wyoming.....	Estelle A. Reel.
South Carolina.....	D. B. Johnson.	Colorado.....	L. C. Greenlee.
Florida.....	Oscar Clute.	New Mexico.....	Hiram Hadley.
Kentucky.....	W. H. Bartholomew.	Arizona.....	Lillian A. Rice.
Tennessee.....	Wharton Jones.	Utah.....	J. L. Millspaugh.
Georgia.....	E. B. Smith.	Nevada.....	Wm. W. Emery.
Alabama.....	J. A. Cunningham.	Idaho.....	F. B. Gault.
Mississippi.....	A. A. Kincannon.	Washington.....	F. J. Barnard.
Louisiana.....	Warren Easton.	Oregon.....	C. C. Stratton.
Texas.....	Supt. Long.	California.....	E. E. Brown.

COMMITTEE ON RESOLUTIONS.

B. A. Hinsdale, of Michigan.	E. A. Anderson, of North Carolina.
William R. Harper, of Illinois.	Earl Barnes, of California.
J. G. Schurman, of New York.	L. E. Wolfe, of Missouri.
N. C. Schaeffer, of Pennsylvania.	

COMMITTEE ON NECROLOGY.

H. S. Tarbell, of Rhode Island.	Warren Easton, of Louisiana.
W. E. Sheldon, of Massachusetts.	J. Baldwin, of Texas.
W. A. Bell, of Indiana.	J. A. Cunningham, of Alabama.

PRESIDENT DOUGHERTY: The greatest heritage that falls to man is the language which he speaks, and of all these the noblest is the English language. We are fortunate, I think, this morning, in having for our subject the consideration of the literature of that language, to be treated by one who in his own contributions so well represents what is good, pure, and noble in that language. I have the honor to introduce Professor Brander Matthews of Columbia University, New York City.

Professor Matthews spoke on "Literature and American Literature."

President Dougherty introduced Professor W. P. Trent of the University of the South, who addressed the association on the subject, "The Teaching of Literature, with Special Reference to Secondary Schools."

Music: Autoharp Solo: Mr. E. A. Merriss of Buffalo.

President Dougherty introduced Mrs. Ella F. Young, Assistant Superintendent of Schools, Chicago, who spoke on the subject of "Literature in Elementary Schools."

Announcements by the Secretary.

Adjourned to 8 p. m., July 8th.

FOURTH SESSION.—WEDNESDAY EVENING, JULY 8TH.

The fourth session was called to order at 8 p. m., in the Music Hall by President Dougherty.

Music by the Æolian Male Quartet of Buffalo.

W. A. Bell of Indianapolis addressed the association on the subject, "Horace Mann at Antioch College."

SECRETARY SHEPARD: In accordance with the constitutional requirements regarding amendments, I am directed to announce to the association at this time that the Board of Directors will, at the session to-morrow morning, recommend for adoption certain amendments to the constitution concerning membership. These amendments are necessary for the purpose of bringing the new constitution into harmony with changes in the classification of members adopted one year ago at the Denver meeting.

President Dougherty introduced the Rev. John H. Vincent, Chancellor of Chautauqua University, who addressed the association on the subject, "School out of School."

Adjourned to 9:45 a. m., July 9th.

A reception to members of the National Educational Association at 74th Regiment Armory followed the adjournment.

THIRD DAY'S PROCEEDINGS.

FIFTH SESSION.—THURSDAY MORNING, JULY 9TH.

The session was called to order at 9:45 a. m., in Music Hall.

Invocation by the Rev. Charles C. Albertson, Pastor Delaware Avenue M. E. Church, Buffalo.

Announcements by Superintendent Emerson and President Dougherty.

DR. NICHOLAS MURRAY BUTLER, of New York: *Mr. President and Ladies and Gentlemen:* The Executive Committee have found that there is still some misunderstanding regarding the provisions of membership in the association as ordered by the constitutional amendment adopted at Denver one year ago. The effect of these amendments was to distinguish the active from associate members of this association. Active members are the permanent participating and supporting members of this body. They alone are eligible for election to office, either in the general association or in any of the departments. They alone are entitled to participate in expressions of opinion in the transaction of the business of the association. Those persons who are connected in any way, however indirectly, with educational work, and who express a desire to be enrolled as active members, may become such. Teachers, principals, superintendents, college professors, and trustees of educational institutions, officers of libraries, and persons connected in any way with educational publications and journals, are entitled to apply for active membership. The active members pay the annual fee of two dollars, and receive in return therefor a volume of proceedings, and all other publications of the association, without any formality or the forwarding of any coupons. Their names alone are printed in the list of members appended to each annual volume. Active members—or persons eligible for active membership, who have attended any two meetings of the association previous to this one, not necessarily continuous—retain their active membership by stating that fact to the Secretary or to the Treasurer at Ellicott Square and paying the annual dues. Other persons eligible, who have not attended two previous meetings, are required to pay an enrollment fee of two dollars. These fees are receipted for on a blue receipt, and an active membership badge is issued, which contains not only a representation of the patron animal of this city, but a book pendant against a background of blue ribbon. I make this statement at the request of the Executive Committee.

PRESIDENT DOUGHERTY: One of the rules of our association is that no paper shall be read unless the person preparing the paper is present and reads that paper himself. This rule has never been violated; but on the evening of June first I received a telegram from President Jordan of Leland Stanford Jr. University, informing me that he had been appointed at the head of the Behring Sea Commission, and asking what should be done with reference to his paper, which was at that time prepared. I replied at once that in his case the rule of the association did not apply; that he had been called to the service of his country and it would be rank treason upon his part to refuse to do his duty; that this association would be glad to have read

by another, a friend of his who sympathizes with his views, the production which he had prepared. This decision of your President has been unanimously approved by the Executive Committee. I take great pleasure in introducing to you Professor Jackman of the Chicago Normal School, who will read the paper prepared by President David Starr Jordan of Leland Stanford Jr. University on the subject, "The Function of Nature Study in the Culture of the Moral Powers."

Principal O. S. Wescott, of North Division High School, Chicago, addressed the association on "Nature Study."

President M. G. Brumbaugh, Juniata College, spoke on "Nature Study in Elementary Education."

Music: "Mignon:" By Miss Caroline Eckert.

Discussion of the subject by President L. D. Harvey, State Normal School, Milwaukee, Wis.; Professor J. N. Wilkinson, State Normal School, Emporia, Kan.; Mrs. Eva D. Kellogg, Editor of *Primary Education*, Chicago, Ill., and Dr. G. Stanley Hall, Clark University, Worcester, Mass.

Announcements by President Dougherty.

Secretary Shepard submitted the following report of the Committee on Revision of Constitution with a recommendation from the Board of Directors that the same be adopted.

REPORT OF THE COMMITTEE ON REVISION OF THE CONSTITUTION OF THE NATIONAL EDUCATIONAL ASSOCIATION, submitted in advance of the meeting of the Board of Directors, in accordance with resolution passed by the Board at its meeting in Denver, Colo., July 9, 1895.

To the Board of Directors of the National Educational Association.

Gentlemen: The committee to whom certain matters concerning the further revision of the constitution were referred, at the meeting of the Board held July 9, 1895, beg leave to submit the following:

We recommend that the constitution be amended as follows:

Article III., Section 3: Add to line ten "All life members and Life Directors shall be denominated active members, and shall enjoy all the powers and privileges of such members without the payment of annual dues."

Article IV., Section 2: Insert after line 5, "All past Presidents of the association now living, and all future Presidents at the close of their respective terms of office, and the United States Commissioner of Education, shall become Life Directors of the association."

Section 3: Insert after "chosen" in line 1, "by the active members of the association."

Section 4: In line 4 change the phrase "a member of the association" to "an active member of the association."

Section 8: In line 5 insert "active" between "twenty" and "members."

Section 9: Lines 11 and 12 to read "The Board of Trustees thus elected shall constitute the body corporate of the association, as provided in the certificate of incorporation," etc.

COMMITTEE:	{	AARON GOVE, <i>Chairman</i> .
		J. M. GREENWOOD.
		JAMES H. CANFIELD.
		NICHOLAS MURRAY BUTLER.
		IRWIN SHEPARD.

Superintendent W. H. Maxwell moved the adoption of the report as read, which motion was duly seconded, and by the unanimous vote of the association the proposed amendments to the constitution were adopted.

F. Louis Soldan, Chairman Committee on Nominations, submitted the report of that committee as follows:

The Committee on Nominations beg leave to submit the following report:

For President, Charles R. Skinner, of New York.

Secretary, Irwin Shepard, of Minnesota.

Treasurer, I. C. McNeill, of Wisconsin.

For Vice Presidents:

Newton C. Dougherty, of Illinois.

W. H. Bartholomew, of Kentucky.

J. N. Wilkinson, of Kansas.

Thomas A. Futrall, of Arkansas.

W. W. Stetson, of Maine.

O. H. Cooper, of Texas.

Emma F. Bates, of North Dakota.

James K. Powers, of Alabama.

C. G. Pearse, of Nebraska.

J. H. Collins, of Illinois.

Thomas B. Stockwell, of Rhode Island.

J. T. Merrill, of Iowa.

For Directors:

John S. Locke, Saco, Me.

C. C. Rounds, Plymouth, N. H.

Mason Stone, Montpelier, Vt.

Charles F. Carroll, Worcester, Mass.

Gilman C. Fisher, Pawtucket, R. I.

George B. Hurd, New Haven, Conn.

A. B. Blodgett, Syracuse, N. Y.

James M. Ralston, Asbury Park, N. J.

N. C. Schaeffer, Harrisburg, Pa.

A. H. Berlin, Wilmington, Del.

Henry A. Wise, Baltimore, Md.

John Eaton, Washington, D. C.

E. C. Glass, Lynchburg, Va.

J. L. Goodknight, Morgantown, W. Va.

Chas. D. McIver, Greensboro, N. C.

W. H. Hand, Chester, S. C.

W. N. Sheats, Tallahassee, Fla.

McHenry Rhoads, Frankfort, Ky.

Wharton S. Jones, Memphis, Tenn.

Euler B. Smith, Athens, Ga.

F. M. Roof, Birmingham, Ala.

A. A. Kincannon, Jackson, Miss.

Warren Easton, New Orleans, La.

H. C. Pritchett, Huntsville, Texas.

J. H. Hinemon, Pine Bluff, Ark.

J. J. Burns, Canton, Ohio.

Mary E. Nicholson, Indianapolis, Ind.

F. D. Thompson, Galesburg, Ill.

S. E. Whitney, Detroit, Mich.

L. D. Harvey, Milwaukee, Wis.

F. B. Cooper, Des Moines, Iowa.

C. B. Gilbert, St. Paul, Minn.

John R. Kirk, Jefferson City, Mo.

Emma F. Bates, Bismarck, No. Dak.

Geo. M. Smith, Vermillion, So. Dak.

Frank A. Barton, Lincoln, Neb.

John MacDonald, Topeka, Kan.

J. M. Hamilton, Missoula, Mont.

A. L. Putnam, New Castle, Wyo.

J. H. Van Sickle, Denver, Colo.

Hiram Hadley, Albuquerque, N. M.

T. B. Comstock, Tucson, Ariz.

W. R. Malone, Salt Lake City, Utah.

J. E. Stubbs, Reno, Nev.

F. B. Gault, Moscow, Idaho.

Mark W. Harrington, Seattle, Wash.

M. G. Royal, Weston, Ore.

Earl Barnes, Stanford University, Cal.

David R. Boyd, Norman, Okla.

On motion of Dr. John W. Cook of Illinois, the secretary of the association was unanimously instructed to cast the ballot of the association for the election of the officers named in the report of the Committee on Nominations.

The Secretary announced that the ballot had been cast as directed.

The officers above named in the report of the Committee on Nominations were thereupon duly declared elected as officers of the association for the ensuing year.

Adjourned to 8 p. m.

SIXTH SESSION.—THURSDAY EVENING, JULY 9TH.

The session was called to order at 8 o'clock by President Dougherty.

Music by the Guard of Honor Orchestra.

PRESIDENT DOUGHERTY: We learned at the beginning of this session that the last time this association met here it was in the shadow of the great Civil War. One of the men who went out in defence of the flag was your own Gen. Stewart L. Woodford. On his return to his native state that same devotion which led him to expose his life upon the field, also led him to devote a large portion of his time to the great cause of education. He became a soldier in that peaceful army which is enlisted against vice, immorality, and injustice; and to-night, in advancing that cause of public education and public morals, he comes to us to speak upon the American Public School, and I take great pleasure in introducing to you at this time Gen. Stewart L. Woodford, now of Brooklyn.

Address by General Woodford.

Music by the Guard of Honor Orchestra.

PRESIDENT DOUGHERTY: Ladies and Gentlemen: We are indebted to our mother country, England, for many of the best things we have. None of the distinguished families that came to us early in our history has been more loyal or contributed more to high thinking and noble culture than that branch of the House of Lancaster which came with Lord Baltimore at the very beginning of our country's life, and which has remained with us ever since. We have with us to-night a representative, a descendant, of that House, one who has ever been devoted to the cause of higher education, and a friend of the teacher. I take great pleasure in introducing to you the Right Rev. John Lancaster Spalding, Bishop of Peoria, who will address you upon "The Teacher and the School."

Bishop Spalding then addressed the convention on the subject announced.

Music by Principals' Male Quartet of Chicago.

Adjourned to 9:45 a. m., July 10th.

FOURTH DAY'S PROCEEDINGS.

SEVENTH SESSION.—FRIDAY MORNING, JULY 10TH.

The association was called to order by President Dougherty at 9:45 a.m. in the Music Hall.

Invocation by the Rev. J. N. Field, Pastor Prospect Avenue Baptist Church, Buffalo.

Music: Baritone solo by Mr. E. M. Hager of Buffalo.

Professor Albion W. Small, The University of Chicago, addressed the association on "The Relation of Sociology to Education."

Professor Earl Barnes, Leland Stanford Jr. University, spoke on the subject, "The Pupil as a Social Factor."

Music: Duet by Mrs. Clara Barnes Holmes and Mr. Raymond O. Riester.

Discussion of the papers read was opened by Hon. J. M. Harper, Inspector of Superior Schools, Quebec, Canada, and continued by Dr. G. Stanley Hall, of Clark University, Worcester, Mass., and Dr. Wm. T. Harris, United States Commissioner of Education.

Roy Stone, United States Engineer, spoke on the subject of "Country Roads and Country Schools."

PRESIDENT DOUGHERTY: There has been received and placed upon the platform here this beautiful floral tribute to the memory of Dr. N. A. Calkins, Assistant Superintendent of Schools, New York City. It comes from those who were intimately associated with him in work in that great city. To-day we miss his pleasant face and wise counsels, and we turn aside, at this time, from our usual themes to recall the work of that noble life. I am glad to introduce his close personal friend, Superintendent Tarbell of Providence, R. I.

Dr. Horace S. Tarbell, Superintendent of Schools, Providence, R. I., read a memorial address on Norman A. Calkins, LL.D. (See report of Committee on Necrology.)

President Fairchild of the Department of Manual and Industrial Education, offered a resolution which was referred to the Committee on Resolutions without reading.

Adjourned to 8 p. m.

EIGHTH SESSION.—FRIDAY EVENING, JULY 10TH.

The association was called to order by President Dougherty at 8 o'clock in Music Hall.

An overflow meeting was held in the Concert Hall.

Music by the Principals' Male Quartet of Chicago.

PRESIDENT DOUGHERTY: The Empire State of the West has received from the Empire State of the East many gifts which have

added to its wealth. None of these gifts has been more highly appreciated than when New York gave to Illinois the President of her state university, a man whose influence is felt to-day in every township and in every school district in the great Empire State of the West. To-night, ladies and gentlemen, I have the pleasure of introducing to you President Andrew S. Draper, formerly of your state, now of Illinois.

President Andrew S. Draper, University of Illinois, Champaign, addressed the association on "The General Government and Public Education."

MUSIC: Baritone solo by Mr. W. J. Sheehan.

PRESIDENT DOUGHERTY: The work of this association began by a consideration of the life and work of Horace Mann. We saw on that first day how the life of that great man elevated the entire spiritual life of the nation. To-night, as the closing address of this association, there comes before us one who is doing for his own race in the South what Horace Mann did for us all. I have great pleasure in presenting to you Professor Booker T. Washington of Tuskegee Normal Institute, Tuskegee, Ala.

Professor Washington, spoke on "The Educational Needs of the South."

Professor B. A. Hinsdale of Ann Arbor, Mich., Chairman of the Committee on Resolutions, offered the following resolutions:

REPORT OF THE COMMITTEE ON RESOLUTIONS.

Resolved, That we, members of the National Educational Association, assembled in the city of Buffalo in our great annual convocation, feel it to be our imperative duty, as it is our great pleasure, in sending forth this our annual declaration of facts, principles and sentiments, to recognize, first of all, the efforts that have been made by the people of the city to make our meeting so profitable and so attractive. We would recognize fully the long-continued, arduous, and multiplied labors that have contributed to this end. At no previous meeting of the association have the local arrangements been more wisely conceived or more carefully executed. At no previous meeting has a more hearty welcome or a more generous hospitality, been accorded us. For these acts of considerate kindness or thanks are extended to the citizens of the city, and to all committees and officers of local organizations that have participated in the work. Nor do we deem it invidious to recognize in particular the invaluable services that have been rendered by Local Secretary Swift.

Resolved, That our special thanks are due, and are hereby tendered, to the teachers of Buffalo for their assiduity in raising funds to meet the local expenses, for their admirable service on reception and other committees, and for their many acts of gracious politeness. To these teachers, one and all, and to their leader, Superintendent Emerson, our cordial thanks are extended.

Resolved, That we have been especially gratified by the delightful series of receptions provided for the association and its departments. Especially would

we mention those that have been given at the Chapter House of the Women Teachers' Association of the city. This we do, not because these receptions have been more admirable than others, but because they give us an opportunity to mention and to commend this admirable organization, and the unique forces of cultivation that are represented in its Chapter House. The means of literary, esthetic, and social improvement that this house stands for we deem worthy of all praise and wide imitation.

Resolved, That we thank the press of the city for the generous space given to the proceedings of the association, and particularly the excellent reporters who have prepared the matter for the good judgment they have shown in filling the space so generously accorded.

Resolved, That the New York State Department of Education deserves cordial mention for its cheerful co-operation in the efforts that have been made to make the present meeting the gratifying success that it has been. To the teachers of the state, also, our thanks are due for the zealous activity they have shown in rolling up a long list of annual members.

Resolved, That we heartily recognize the generous words of welcome spoken by His Honor the Mayor at the first of our general sessions, and all the measures taken by the city authorities to ensure our safety and comfort. Mention may also be made of the services rendered by the clergymen of the city, and, by no means the least, the various musical talent, local and foreign, that has contributed so much to the pleasure of the meetings, is heartily recognized.

Resolved, That we hereby express our thanks to the various railroad companies that have extended courtesies to the members of the association. We also beg to thank the Smith Premier Typewriter Company for putting at the disposal of the officers and members of the association the excellent writing machines and operators that have contributed so very materially to ease and efficiency in the preparation of the large amount of written matter which such a meeting as the present one renders necessary.

Resolved, That we acknowledge our deep sense of obligation to our retiring President, Superintendent N. C. Dougherty, for his unremitting labors, beginning at Denver one year ago and closing here to-night, to make this meeting the glorious occasion that it has proven to be. The many admirable qualities that he has shown in the discharge of duties that are most arduous, and that constantly tend to become more arduous, command as they deserve the strongest words of appreciation. And while thus thanking our retiring President for his services, we also pledge our incoming President our generous confidence and full co-operation in his efforts to make the next meeting of the National Educational Association equally successful with the present one.

And now, having placed on record these words of recognition of services rendered, we wish further to adopt and send forth to the country the following more general declarations:

Resolved, That we strongly re-affirm our abiding interest in certain educational institutions and movements that have commanded our commendation and support on former occasions.

1. The National Bureau of Education, now conducted with such eminent ability and success by its distinguished head. We congratulate Dr. Harris and the educators of the country upon the more generous appropriation of money made by the present Congress at its late session for printing. We are especially

gratified by the unremitting efforts of Dr. Harris to bring the reports of the Bureau more nearly up to date, so that educators and others may enjoy the benefits of fresher and more recent educational information.

2. The efforts of the national government to extend the beneficent benefits of education to the Indians and Alaskans.

3. The study of children according to scientific methods, so characteristic of the educational period through which we are passing.

4. The kindergarten, which has already done so much for the children of the towns and cities and promises to do so much more.

5. Normal schools, teachers, colleges, and chairs of pedagogy in colleges and universities. In particular do we wish to express our interest in the suggestions that have been made, and the plans that have been offered, looking to the provision of professional training for the secondary teachers of the country, and in the practical efforts that have already been made in that direction. We would fain hope ere long to see professional schools for teachers in many of our states that shall stand in the same relation to our educational systems that the higher normal schools of France stand to the higher educational system of that country.

6. All rational efforts to train the youth of the country in an intelligent and pure patriotism we feel to be deserving of a special commendation. While we are in full accord with the later thought of the individual development of the child, we do not forget and we do not intend to forget, the time-honored American argument for public schools and public education; the argument, namely, that the duties and responsibilities of American citizenship call imperatively for such schools and education. And here we wish to place on record our full and solemn belief that the recurrence this year of the quadrennial presidential canvass and election, while it brings to the country some mischiefs and evils, also brings to it great opportunities for good in the way of political education. Nor do we deem it impertinent to send forth to the country this our full and solemn declaration, that these quadrennial contests stand among the most convincing of arguments for wisdom and persistence in the great work of popular education, including especially the correlative rights and duties of citizenship. In the work of preparing the youth of the land for these rights and duties, the country wisely reposes great confidence in the public schools.

Resolved, That we have observed with interest the effort made by the Department of Public Instruction of the State of New York, looking to providing the licensed teachers of the state with abundant reading material of a general and professional character at state expense. In such a collection of books as the "Teachers' Library," made up under the direction of State Superintendent Skinner, we see the promise of much future good, first to teachers, and then to the school children and people of the state. Surely, a method of augmenting knowledge and stimulating professional insight and spirit that has long worked so successfully in France cannot prove a failure in the Empire state, or in other states of the Union where similar general conditions prevail.

Resolved, That we hail with lively satisfaction the efforts of the last few years to conduct investigations and studies of educational subjects of an original and permanently valuable character. We consider education a rational process that involves all the facts of man's spiritual being, and many of the facts of his material being. Accordingly, it is all-important to discover these facts and to publish them, including those of a social character involving school organization, the classification of pupils and courses of study, as well as those social conditions that so intimately affect public education, as the average wealth of the community

per capita, the distribution of population, and the relative perfection of means of travel and transportation. To be more definite, we wish to recognize the following investigations that are already either completed or in course of prosecution:

1. That conducted under the auspices of the National Council of Education, commonly known as the Report of the Committee of Ten.

2. That conducted under the auspices of the Department of Superintendence by the Committee of Fifteen.

3. The investigation that is now being made, also under the auspices of the Council, into the facts, conditions, and needs of rural schools. This investigation we believe to be, at the present juncture, second in importance to no other that could possibly be instituted, and we confidently expect the members of the Committee that is conducting it to be persevering and indefatigable in their efforts to discover remedies for existing evils and imperfections. So believing and so expecting, we call upon all persons who can in any way assist this movement to render such assistance. Particular mention may be made in this connection of state and local superintendents and the conductors of the public press. We believe that the non-educational press, in particular, is capable of rendering the public an important service in this regard.

4. We also hear, with feelings of lively interest, that still other investigations are proposed under the auspices of the Council; as one into the important subject of school hygiene, and another into the equally important subject of negro education in the south, and we earnestly hope that these investigations will soon be undertaken and be prosecuted to as early a consummation as all the facts involved will justify.

Resolved, That we heartily approve of the course pursued by the Board of Directors of the National Educational Association in extending generous financial assistance to the several investigations that have already been made or undertaken. We repeat our declaration of one year ago, that the National Educational Association is an educational rather than a financial institution, and that the warrant for its existence must be found in its ability to discover great ends of usefulness, and to use its accumulations of money wisely in the prosecution of these ends, rather than in the policy of hoarding them. Still, we recognize not merely the value but also the absolute necessity of financial wisdom and prudence, as well as integrity, in all officers of the association who are charged with judi-
ciary powers, and we commend to the Directory such care, and even caution, in making appropriations from the funds as the condition of the treasury and the needs of the service shall render necessary.

B. A. HINSDALE, *Chairman*.

WILLIAM R. HARPER.

J. G. SCHURMAN.

N. C. SCHAEFFER.

E. A. ANDERSON.

EARL BARNES.

L. E. WOLF.

The resolutions were unanimously adopted.

President Dougherty then addressed the Association:

And now, ladies and gentlemen, the time has arrived to close the thirty-fifth session of the National Educational Association. Before doing so, however, I wish to express my personal gratitude to Dr. Butler, my predecessor, to Mr. Shepard, the Secretary, and to Mr. McNeill, the Treasurer, for their kind assist-

ance in everything pertaining to this meeting. They made my labors easy, and for the success of the meeting, if any credit is due to your officers it is due them rather than to the presiding officer of the hour.

I wish also to express to Superintendent Emerson, to Dr. Bender and to Mr. Swift, to Mr. Mischka and Professor De Groat, and to all others who have so kindly and efficiently assisted them in the local arrangements for this meeting, our sincere appreciation of their work. The arrangements have been the most perfect that have ever greeted the Association at any of its meetings. So perfect have they been that among the ten thousand teachers not one complaint has been heard—not one fault found. The only criticism that has been made is that things have been so perfect that we shall never be able to realize the like again. We carry with us to our homes the most pleasant memories of Buffalo and her generous citizens.

The teachers of Buffalo, under the guidance of their leaders, have shown us what the power of the public school teacher is when rightly directed. If the Buffalo teachers thoroughly united can move a city as they have moved Buffalo in the past months, then the teachers of the nation can accomplish almost any good work with equal unity and equal energy. We shall not forget the Chapter House.

And now to you, President Skinner, the unanimous choice of this association for its commander, I transfer this gavel, the badge of authority, and with it the command of the great army of American teachers—an army enlisted against vice and immorality and injustice. It is a greater and grander army than that which marched with Peter the Hermit for the rescue of the Holy Sepulchre. Its armories may be found not only in every city but upon every prairie and on every hillside. We look to you as our commander for orders, and until the session of 1897 is closed we are your loyal soldiers.

President Skinner, in taking the gavel, said:

Mr. President, Teachers, Superintendents and Friends: In the course of my educational work, it has been my good fortune to follow noble leaders, Dr. Draper, who left his impress for good upon the public school system of New York state, and who is now making his impression upon the Empire state of the west, noble leader, wise educator; also my friend and your friend, President Dougherty, who has so thoroughly impressed his personality upon the most successful convention in the history of this association.

I can not be indifferent to the high honor of being chosen to preside over the greatest educational association in the world. So far as words are adequate, I desire to express my gratitude for the honor conferred upon me, and through me upon the state which we love so well, and whose servant I am proud to be. I appreciate well the duties and responsibilities which rest upon a President of this association, and I ask your sympathy for those whose duty it will be to prepare the program for the next association, and for the city which must hold Buffalo as her model. To do as well shall be our aim; to do better seems to be an impossibility.

There are no easy paths in education, but there are bright sides to our work. I shall rely very largely upon loyal, earnest friends of education, and I know that my reliance will not be in vain. I pledge you, my friends, to labor steadfastly to extend the usefulness of this association. My earnest effort shall be to uplift the glorious cause in which we are enlisted. To deserve your approval is my high ambition, and to receive it shall be my richest reward. More and

more we come to know that the true teacher is the corner stone of our educational structure. In the teacher is represented the majesty of our glorious Republic.

The preamble of the constitution of this association declares it to be its purpose to elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States. The great audiences which have assembled during the meetings of this association, are a wonderful testimony to the increasing interest of the public in popular education. This is most encouraging. Never, more than now, in this great country of ours, was there greater need of educated citizenship. Dangers threaten our national character and credit, and these dangers can be averted only through the mighty influences of education. It is the duty of educated men and women throughout this land to work unceasingly for the broadening and deepening of all the influences which can lead to an enlightened American citizenship.

And now, my friends, the ideal convention of 1896 is a happy memory. Emphasizing the spirit which pervaded the audience in this hall last evening, when we listened to the stirring strains of the "Star Spangled Banner," and the enthusiastic throng rose to its feet and demonstrated its interest in American institutions, this convention will close with the singing of "America."

The great audience arose and joined in the singing of "America" and the convention was adjourned *sine die*.

NEWTON C. DOUGHERTY,
President.

IRWIN SHEPARD,
Secretary.

MINUTES OF THE MEETINGS OF THE BOARD OF DIRECTORS.

BUFFALO, N. Y., July 7, 1896.

The Board of Directors of the National Educational Association 1895-96, was called to order by President Dougherty in the Hall of Natural Science, Public Library, Buffalo, at 11 a. m.

On call of the roll by Secretary Shepard, the following Directors responded:

Newton C. Dougherty, Illinois; Nicholas Murray Butler, New York; Irwin Shepard, Minnesota; George T. Fairchild, Kansas; J. M. Greenwood, Missouri; Aaron Gove, Colorado; Charles I. Parker, Illinois; Charles G. White, Michigan; William Jenkins, Illinois; C. C. Rounds, New Hampshire; George B. Hurd, Connecticut; Charles R. Skinner, New York; J. M. Ralston, New Jersey; Charles De Garmo, Pennsylvania; Oscar Clute, Florida; Warren Easton, Louisiana; W. J. White, Ohio; John W. Cook, Illinois; S Emory Whitney, Michigan; D. D. Mayne, Wisconsin; F. B. Cooper, Iowa; C. B. Gilbert, Minnesota; John R. Kirk, Missouri; Emma F. Bates, North Dakota; W. H. Skinner, Nebraska; John MacDonald, Kansas; James M. Hamilton, Montana; J. H. Van Sickle, Colorado; W. R. Malone, Utah; F. B. Gault, Idaho; Earl Barnes, California.

On motion of Director Van Sickle of Colorado, the reading of the minutes of the last meeting of the Directors was dispensed with, and the minutes as printed in the proceedings of the Denver (1895) Meeting were approved.

Secretary Shepard read the report of the Committee on Revision of the Constitution and By-laws, as follows:

To the Board of Directors of the National Educational Association:

GENTLEMEN: The committee to whom certain matters concerning the further revision of the constitution were referred at the meeting of the Board, held July 9, 1895, beg leave to submit the following:

We recommend that the constitution be amended as follows:

Article III., Section 3: Add to line 10 "All life members and Life Directors shall be denominated active members, and shall enjoy all the powers and privileges of such members without the payment of annual dues."

Article IV., Section 2: Insert after line 5 "All past Presidents of the association now living, all future Presidents at the close of their respective terms of office, and the United States Commissioner of Education, shall become Life Directors of the association."

Section 3: Insert after "chosen," in line 1, "by the active members of the association."

Section 4: In line 4 change the phrase, "a member of the association," to "an active member of the association."

Section 8: In line 5 insert "active" between "twenty" and "members."

Section 9: Lines 11 and 12 to read, "The Board of Trustees thus elected shall constitute the body corporate of the association, as provided in the certificate of incorporation," etc.

	{ AARON GOVE, <i>Chairman</i> .
	{ J. M. GREENWOOD.
COMMITTEE:	{ JAMES H. CANFIELD.
	{ NICHOLAS MURRAY BUTLER.
	{ IRWIN SHEPARD.

DIRECTOR GOVE: My attention is called to the fifth line of section 2, Article IV., of the Constitution. I move that section 2 of Article IV., be amended by striking out the words "now (July 10, 1895)" from the fifth line of said section. Seconded and carried.

Director Fairchild moved the adoption of the entire report. Seconded.

DIRECTOR BUTLER: I suggest that we also request the Secretary of the association to transmit the report to the association with the recommendation that the constitution be amended in accordance with the report.

The amendment of Director Butler was accepted by Director Fairchild and the report was adopted and referred to the association for final action.

PRESIDENT DOUGHERTY: There is a vacancy in the Board of Trustees to be filled by election.

Soon after the death of Dr. Calkins, Chairman of the Board of Trustees, The Executive Committee unanimously nominated Dr. Nicholas Murray Butler of New York as a member of the Board of Trustees. This nomination was submitted by correspondence to the members of the Board of Directors and unanimously confirmed. Some question arose as to the legality of that action afterwards, and Dr. Butler promptly resigned.

DIRECTOR SKINNER: I move that the action of the Executive Committee in nominating Dr. Butler be approved. Seconded. Carried.

DIRECTOR SKINNER: In order to set at rest any doubt as to the legality of the election of Dr. Butler, I now nominate Dr. Nicholas Murray Butler of New York City as a Trustee of this association *vice* N. A. Calkins, deceased; and I move that the Secretary be instructed to cast the unanimous ballot of this board for Dr. Butler. Seconded. Carried.

The Secretary announced that he had cast a ballot in accordance with instructions.

Dr. Nicholas Murray Butler was thereupon declared duly elected

a member of the Board of Trustees of this association *vice* N. A. Calkins, deceased.

Trustee Butler arose to a question of privilege and said: I desire to make a brief explanation to the Board. Personally I had no question as to the legality of the action by which the Directors honored me with an election last year; but it seemed to me to be very desirable, on many accounts, that we should not leave the feeling in the mind of anyone of our members that everything had not been done in accordance with the strict letter of the constitution, and, therefore, with the greatest respect for the Directors and with gratitude to them, I took the liberty of resigning in order that the matter might be again placed before them for such action as they saw fit. I desire to make this explanation in order that I may not appear to have been captious, and to express my thanks for the election again tendered me.

Treasurer I. C. McNeill of the National Association submitted his report.

On motion of Director Tarbell, the report of the Treasurer was received and ordered filed with the Secretary.

The request of Treasurer McNeill for leave to carry as cash the balance in the Union National Bank in Denver, until the next annual report, was granted.

The Chairman of the Board of Trustees, Mr. Tarbell of Rhode Island, submitted his report, which, on motion of Director Greenwood, was approved, and ordered filed.

Secretary Shepard reported to the Board of Directors concerning the revision of list of membership in the association and said: In accordance with instructions given me at the Denver meeting, the membership of the association has been revised in harmony with the amendments to the Constitution. A much larger amount of labor has been involved than was expected. We have had 50,000 different members since the Madison meeting, since which time the average membership in attendance upon each meeting has been about 5,000. Prior to the time of the Madison meeting the average membership for each meeting was about 250. The revision of these lists involved a great amount of clerical labor, but it has not been entirely without profit because, by reason of payment of past dues of membership, \$1312, has been gathered into the treasury of the association.

Following a report of Directors Tarbell and Sabin, from the Committee of Twelve on Rural Schools, on motion of Director Gilbert, it was voted to appropriate so much of an additional \$1,000 from the Emergency Fund as might, in the judgment of that Committee, become necessary for the proper prosecution of their work.

DIRECTOR BUTLER: I move that the authority for the disbursement of this additional \$1,000 be put in the language of the original resolution creating this committee, and subject to all the conditions and restrictions of the action of the board concerning the original appropriation, as found in the Proceedings of the Denver Meeting, July 12, 1895. Seconded. Carried.

On motion of Director Tarbell, the Board of Trustees were authorized and instructed to pay to the order of Zalmon Richards, of Washington, D. C., the sum of \$250 for extra work, as custodian during the present and preceding years.

Director Butler introduced Mr. Melvil Dewey of New York, who presented the following petition for the establishment of a department to be known as the Library Section of the National Educational Association.

To the Honorable Board of Directors of the National Educational Association:

GENTLEMEN: School libraries have become important factors in educational work. One of the most valuable equipments one can give young people for their work in life is such knowledge of books and their use as will enable them to go direct to sources of correct information and sound opinion. This equipment can be best given, in fact it can only be given to the average child, by the use of a school library, reference or other.

A collection of books in every schoolroom for everyday use is coming to be considered a most essential part of a school building's furniture. These books introduce children to the best literature of the world; they interest them in other phases of any subject they may be studying than those set forth in their text-books: They arouse in them the love of reading, and give them a habit of reading; they waken and inspire the teacher, and make it essential that she, herself, shall go outside the text-book work if she would keep up with the advancement of her pupils; they familiarize the children with books and their use; and, in any subject, they permit the beginning of that laboratory method which is now considered so essential in all educational work.

In connection with these school libraries a great many questions have arisen and are constantly arising—questions not yet satisfactorily answered. As, for instance, in regard to the number of books that should be included in them; the character of these books; the best reading for the young; the best reference books for the young; questions of lending, of access, of manner of use, of influence, etc. These are all matters which intimately concern the teachers. They are matters that, in a different field, have been discussed by librarians in the annual conference of the American Library Association and in their library journals. Owing to the great demands on the librarians of public libraries in other directions, and owing to the peculiar nature of the questions which arise in regard to school libraries, it is not possible for professional librarians, as such, to discuss, to propound, or to answer, as they should be answered, the questions in regard to school libraries already hinted at.

In view of these considerations; of the widespread and growing interest in the subject, and of the very important work such a department could do in enlightening school men, especially boards of education and superintendents,

in regard to the necessity for equipping schoolrooms with appropriate book collections, we respectfully urge that you establish a School Library Section of the National Educational Association.

The above petition was duly signed by a large number of the active members of the association.

The petition was discussed by Directors Rounds, Cook (of Ills.,) Van Sickle and others, and on motion, after Mr. Dewey had been granted leave to strike the word "school" before the word "library" from the last line of the petition, the petition, as thus amended, was unanimously granted and the department established.

Whereupon the Board of Directors adjourned *sine die*.

IRWIN SHEPARD,
Secretary

NEWTON C. DOUGHERTY,
President.

MINUTES OF THE MEETINGS OF THE NEW BOARD OF DIRECTORS.

1896-97.

The new Board of Directors of the association was called to order in the Natural Science Hall of the Public Library, Buffalo, at 4 p. m., Thursday, July 9, 1896.

President-elect Skinner in the chair.

On the call of the roll, the following Directors responded.

Directors Lane of Illinois, Cook of New York, Soldan of Missouri, Butler of New York, Marble of New York, Harris of District of Columbia, Fisher of Rhode Island, Berlin of Delaware, McIver of North Carolina, Rhoads of Kentucky, Jones of Tennessee, Smith of Georgia, Kincannon of Mississippi, Easton of Louisiana, Hinemon of Arkansas, Nicholson of Indiana, Thompson of Illinois, Whitney of Michigan, Harvey of Wisconsin, Cooper of Iowa, Gilbert of Minnesota, Kirk of Missouri, Bates of North Dakota, Smith of South Dakota, MacDonald of Kansas, Van Sickle of Colorado, Hadley of New Mexico, Gault of Idaho, Harrington of Washington, and Royal of Oregon.

Superintendent Jones of Cleveland, Ohio, presented a petition for the establishment of a Department of Reading and Elocution, which, on motion of Director Cook of New York, was ordered laid upon the table.

Director Dougherty offered a petition for the establishment of a Department for the Education of the Defective Classes, which petition was granted and the department ordered established.

The petition was as follows:

BUFFALO, N. Y., July 9, 1896.

To the Honorable Board of Directors, National Educational Association:

The undersigned respectfully petition your Board to make provision for a Department for the Education of the Defective Classes which will represent at our annual meetings more especially the work of instruction in the various institutions for the blind, the deaf, and the dumb. Inasmuch as this phase of educational work has never been represented at the national gatherings, and since such representation would be exceedingly helpful, and has never heretofore been extended to these, we sincerely hope that this request will be favorably considered and meet with approval.

FREDERICK R. PLACE, Raleigh, N. C., Superintendent Instruction for Deaf, Dumb and Blind.

WILLIAM O. KROHN, University of Illinois, Department of Psychology.

S. T. WALKER, Superintendent Institution for Deaf and Dumb, Jacksonville, Ill.

J. W. JONES, Columbus, Ohio, Superintendent Institution for Deaf and Dumb.

S. B. POWELL, Glenwood Iowa, Superintendent School for Feeble-Minded.

W. S. CHRISTOPHER, M. D., Professor of Pediatrics, College of Physicians and Surgeons, Chicago, Ill.
WM. B. WAIT, New York City, Superintendent Institution for Blind.
F. MORRISON, Baltimore, Superintendent Institution for Blind.
CHAS. A. BARNES, Jacksonville, Ill., Institution for Blind (Pres. of Board).
L. J. McNABB, Springfield, Ill., Member Board of Charities.
FRANK H. HALL, Superintendent of Schools, Waukegan, Ill.
MRS. LUCY L. FLOWER, Chicago, Ill.
GEO. F. MUNN, Secretary Board of Charities, Springfield, Ill.
ARTHUR McDONALD, Specialist, Bureau of Education, Washington, D. C.
L. S. ALLEN, Philadelphia, Pa.
W. S. TITUS, M. D., Seattle, Wash.
LYNN S. PEASE, Janesville, Wis.
JONAS COSTIEN, Raleigh, N. C.
DR. J. T. SIBLEY, St. Louis.
FRANK J. NORBERY, M. D., St. Louis, Mo.
JAMES CRISSEY, Flint, Mich.
J. H. KOOMS, M. D., Seattle, Wash.
THOMAS RAINES, Rochester, N. Y.
B. F. MONTAGUE, Raleigh, N. C.

(Since the above petition was not signed by twenty active members of the Association, the action of the Board of Directors granting the petition was irregular. No action has been taken establishing the department.—SECRETARY.)

On motion of Director Gove of Denver, seconded by Director Harris, Director J. Ormond Wilson of Washington, D. C., was unanimously elected a member of the Board of Trustees to succeed Zalmon Richards, of Washington, whose term had expired.

Director Tarbell moved to take from the table the petition of Superintendent Jones of Ohio, for the establishment of a Department of Reading and Elocution, which motion was lost by a rising vote of eleven to nineteen.

President Skinner appointed Directors Harris, Dougherty and Tarbell as a committee to recommend names to fill existing vacancies in the Council of Education.

Director Harris, chairman of the committee, subsequently submitted his report as follows:

To the Board of Directors of the National Educational Association:

GENTLEMEN: Your committee appointed to recommend suitable names to fill existing vacancies in the National Council of Education respectfully report and recommend as follows:

E. C. Hewett of Illinois (to succeed himself).
A. G. Lane of Illinois (to succeed A. J. Rickoff of California).
E. B. Smith of Georgia (to succeed himself).
Charles A. McMurry of Illinois (to succeed himself).
J. F. Millspaugh of Utah (to succeed himself).
W. L. Hervey of New York (to succeed N. A. Calkins, deceased).
James H. Canfield of Ohio (to succeed himself).

(Signed) WM. T. HARRIS.
N. C. DOUGHERTY.
H. S. TARBELL.

On motion of Director Gove of Colorado, the following was unanimously adopted.

Resolved, That the President of the Department of Superintendence be, and hereby is, authorized to expend a sum not to exceed \$200 to cover the necessary expenses of the meeting of the Department in February, 1897.

Director Butler asked leave to file with the Secretary the following petitions from the Departments of Higher and Secondary Education and the Department of Science, simply for the information of the Board of Directors, but without any recommendation at the present time. The same were filed and ordered printed, as follows:

The Departments of Higher and Secondary Education, in joint meeting, respectfully petition the Board of Directors of the National Educational Association to appropriate the sum of \$2,500, at as early a day as may be practicable, for the purpose of continuing the work of the Joint Committee of these departments on College Entrance Requirements.

(Signed) JAMES H. BAKER, President Department of Higher Education.

JOSEPH SWAIN, Secretary Department of Higher Education.

EDWARD L. HARRIS, President Department of Secondary Education.

C. H. THURBER, Secretary Department of Secondary Education.

Also:

The Department of Science of the National Educational Association respectfully petitions the Board of Directors of the National Educational Association to appropriate the sum of \$2,500, at as early a day as may be practicable, for the purpose of continuing the work of the Joint Committee on College Entrance Requirements of the Departments of Higher and Secondary Education.

CHAS. SKEELE PALMER, *Secretary Science Department.*

Director Butler offered the following resolution which was unanimously adopted.

Resolved, That an appropriation of \$750 be, and is, hereby authorized to be paid to the Treasurer of the National Educational Association, in equal semi-annual payments, for the purpose of securing clerical assistance in the discharge of the duties of his office, and for such other miscellaneous expenses as are necessarily connected therewith.

Resolved, That for the year 1896-97 an appropriation of \$1,500 be, and is, hereby made to the Secretary of the National Educational Association, to be paid in three equal installments, as compensation for the performance of the duties of his office, which duties shall include the editing of the volume of proceedings.

On motion of Mr. Cook of New York, the Secretary was instructed to proceed with the call of the roll of the states on the selection of place of holding the next meeting.

Invitations were received from the following named cities: Minneapolis, Milwaukee, Detroit, Seattle, Nashville and Saratoga. A large number of communications in support of the several invitations were filed with the Secretary.

An informal ballot was ordered, after which, on motion of Director

Butler, the result of the informal ballot was referred to the Executive Committee as an expression of the preference of the Board of Directors, with full power on the part of the Executive Committee to select the time and place of meeting of this association in 1897.

The result of an informal ballot was as follows:

	<i>First Choice.</i>	<i>Second Choice.</i>	<i>Third Choice.</i>	<i>Total.</i>
Minneapolis	15	12	7	34
Milwaukee	15	14	4	33
Detroit	7	9	15	31
Seattle	2	1	5	8
Nashville	1	1	3	5
Saratoga	—	1	2	3

After the informal ballot, unanimous leave was given Mr. C. J. Pearse, Superintendent of Schools of Omaha, and State Superintendent Corbett of Nebraska, to present a petition inviting the association to hold its meeting for 1898 in Omaha, Neb. The communication was ordered placed on file.

Director Van Sickle of Colorado, offered the following resolution, which was declared out of order, but by unanimous consent was ordered filed with the secretary.

BUFFALO, N. Y., July 9, 1896.

In view of the fact that the National Educational Association is invited by the City of Omaha, Neb., to hold its meeting for 1898 in that city, and in view of the fact that during the summer the Trans-Mississippi and International Exposition will be in progress at that place, we, the Board of Directors of the National Educational Association, express our appreciation of the invitation which has been extended to us by the city of Omaha, and express our hope that the Executive Committee for that year will spare no effort to satisfy itself that ample hotel and convention hall facilities, as well as suitable railway rates, may be secured at Omaha, and hope that in that event they may decide to hold the meeting for that year in Omaha as per the invitation of the Commercial Club and other bodies of that city and state.

Whereupon the Board adjourned *sine die*

IRWIN SHEPARD,
Secretary.

CHARLES R. SKINNER,
President.

GENERAL SESSIONS OF THE ASSOCIATION.

ADDRESSES OF WELCOME.

HENRY P. EMERSON, SUPERINTENDENT OF EDUCATION, BUFFALO, N. Y.,
AND CHAIRMAN OF THE LOCAL EXECUTIVE COMMITTEE.

Ladies and Gentlemen :

Of all the multitude of people who gather at these annual meetings I think it may safely be said that no one awaits the event with more solicitude than the chairman of the local Executive Committee.

While I trust the result will show that there is no need of apology on account of any lack in the way of entertainment, yet it is but fair to remind you that, owing to the delay in selecting a place of meeting, we began our preparations several months later than is usual. When I returned from the Jacksonville meeting about the first of March, nothing had been done. But an efficient organization was soon formed; our citizens, and especially our teachers, responded with enthusiasm to the call when it finally came, and our local secretary proved to have been born for just the kind of work he was expected to do. So I trust that every visitor will be well cared for in Buffalo, have a pleasant sojourn among us, and go away with pleasant recollections of our city.

This association has met in Buffalo once before, in 1860. The mind naturally dwells upon the changes that have taken place since that meeting. The country was then entering the shadows of a great civil war. The records of the association, showing that no meetings were held during the succeeding two years, bear silent testimony to the distraction of those troublous times, and remind us how that tremendous conflict dwarfed all other interests. During this period of thirty-six years "the battles, sieges, fortunes" of the war have been passed, the country has recovered from its terrible shock and prostration, a marvelous era of development in population and resources has taken place, and the representation here from every state in the Union indicates, we devoutly hope, that the country is reunited as never before.

What a wonderful growth this organization has experienced since

then. A few of our older Buffalo teachers remember that earlier meeting. I doubt if over 100 delegates from outside our own limits attended its sessions. It is as yet impossible to estimate how many thousands will be in attendance this year. The growth has not been alone in numbers but in improved organization, a better spirit, higher aims, and more widely extended influence for good.

Since 1860 the population of Buffalo has grown from 80,000 to 350,000; its public school registration from less than 10,000 to over 50,000. Then there was scarcely an acre of public park land in the city; now there are over 900 acres. Then there were but few paved streets; now there are, as you have doubtless heard before, over 200 miles of asphalt pavement alone.

I am not going to worry you with figures about tonnage, and live stock, and lumber, or try to impress upon you a sense of the present greatness or future promise of Buffalo. Mr. Swift has shown himself equal to that task and has made my burden light in that direction. We hope you will stay in our midst long enough to know our city for yourselves, to mingle with its people, to enjoy its parks, its beautiful avenues, its river and its summer resorts.

If our schools were in session I am sure you would find evidences of earnestness and progress there, as you would find many indications of an educational awakening among our people. The fact that over 800 of our city teachers have joined this association is certainly a good thing for the association and a good omen for Buffalo. During the past year we have opened eight new school houses with a seating capacity of 6000; three other buildings, including a second high school, are in process of construction, and the city has just been given authority by the state legislature to spend half a million dollars more in extending our school facilities.

We are glad to entertain this honored association in Buffalo. We believe it means much for our local educational interests. We believe our teachers will be intellectually quickened, our citizens encouraged and inspired, and our school system benefitted by reason of your presence. One of the pleasantest features of the preparatory work has been the faith manifested by thousands of our citizens that this great convocation with its suggestive papers, its able discussions, participated in by men and women of national reputation, its opportunities for interchange of opinion, would give a strong and lasting impetus to the educational work of this city.

HON. EDGAR B. JEWETT, MAYOR OF BUFFALO.

Mr. President, Ladies and Gentlemen :

On behalf of the people of the city of Buffalo, I give to the delegates to this great convention, here assembled, a most sincere and cordial welcome.

It is hardly necessary for me to say that this enormous gathering, composed of representatives from every quarter of our glorious country, and comprising so much brains, (and I am inspired to add, by all that I see beneath the bonnets of the ladies, so much loveliness and beauty), is an event of great and far-reaching importance to our city.

Though Buffalo has been famed as a convention city, I think this is the largest and most notable convention that has ever been held here. It will have a lasting effect upon our city, as it will stimulate the sacred cause of education in Buffalo, and it will also be the means of heralding, to the remotest regions of the country, the enviable fame Buffalo has acquired of being one of the most beautiful and delightful cities in the world.

We feel greatly honored that you have chosen this city as a place for holding your deliberations this year, and will strive, by extending to you an open-hearted and open-handed hospitality, to leave you no cause to regret your choice. We trust that you will all have time, before taking leave of us, to see some of the many sights and attractions of the city and its suburbs. Those of you who have adopted that modern instrument of locomotion, the bicycle, will find Buffalo a paradise indeed, with its 200 miles of asphalt pavements, as smooth and clean as a ball-room floor. You are invited to take a spin out through the residence streets and see the homes of our citizens, for the homes of Buffalo are her crowning glory.

Just as the home is the bulwark of the American republic, so it is the corner stone of our city. The American home here reaches its highest ideal. From these homes of which we are so proud spring that love of peace and order, that patriotism which is pure and unselfish, that demand for honesty in public office and good government in every branch of the public service, in fact, that private and civic virtue which is so characteristic of our citizens. Those of you who do not happen to be votaries of the wheel may obtain a general knowledge of our city by rolling over the smooth and shady streets in a carriage, or if that is not feasible perhaps an electric car will do as well. A visit to the park and a view of the head of the Niagara river and Lake Erie from the front, should not be forgotten.

I feel that in coming to Buffalo you have come to a city which is

sincerely friendly to the cause of education. During the last two years our people have spent over one million dollars for new schools, and I think we have erected some of the best buildings in the country. We have a most efficient superintendent, in whom the people recently expressed their confidence by giving him the greatest majority ever given a candidate for office in this city. It is the aim of the present administration to improve the schools in every way, and we will not cease our efforts until they are the equal of any schools in the country. This great convention will prove a powerful help and stimulus to our work.

On behalf of the city of Buffalo, I offer you, one and all, the freedom of the city. I trust your stay here will be both pleasant and profitable, and that we may have the great pleasure, in the not distant future, of entertaining you again.

DR. IDA C. BENDER, SUPERVISOR OF PRIMARY WORK IN THE BUFFALO
PUBLIC SCHOOLS.

Mr. President, Ladies and Gentlemen :

On any other occasion I should feel like saying how proud I am to share in these exercises to-day. However, every individual consideration is lost in the feeling which concerns my community. It is impossible to be too emphatic in speaking of the pride which the city of Buffalo feels in entertaining this association. The eloquent gentlemen who have preceded me have told of the wonderful opportunities for enjoyment in Buffalo. They have extended to you a warm welcome on behalf of the municipality, and the Department of Education, and it remains for me to say a few simple words for the women of Buffalo, and particularly for the women teachers of the city. It is quite impossible for one woman to represent the admirable qualities of Buffalo women, or to give a fitting expression of the cordiality which they are ready to extend to you all. If you will consult your programs, you will see that it takes four of the most distinguished citizens of the Empire State to do that for the men. If, therefore, what I say falls short of what you think ought to be said, remember that if there were four of us there would be more of us and more eloquence and more speaking.

A glance at this audience discloses the fact that a large proportion of the entire body of visiting delegates are women. We had tried to keep this fact in mind in the days of preparation for your coming, believing that, as women, we had perhaps a better understanding of what is needed for the comfort and well-being of our sisters than even the wisest of men, with Dr. Harris at their head. So we have tried,

in a modest way, to get everything ready to relieve the mind and body from care, anxiety, and fatigue, and to prepare it for the enjoyment of this city and this meeting.

I would not have you infer that we exercised no forethought in regard to the men, but a confession at this time is hardly appropriate.

In all these preparations something more than the temporary success of this meeting has been in our minds. We women are hoping to prove that, in spite of aspirations for the higher intellectual life, and an expanded arena for thought and action, we shall still keep those qualities which go to make up true womanliness,—modesty, insight, a ready sympathy, tact and patience; and, above all things, the quiet and unobtrusive ministrations of the home. These endure among us, and they will endure even more in that dawning of the golden age for woman—the twentieth century. So, delegates to the National Educational Association, in this spirit and on the part of the women of Buffalo I ask you to be at home in our city.

HON. CHARLES R. SKINNER, STATE SUPERINTENDENT OF PUBLIC
INSTRUCTION, NEW YORK.

Teachers of the Republic :

The friends of education in the Empire State hold out their hands to you in cordial greeting, and bid you a hearty welcome to the Queen City of the Lakes and of the grandest state of the Union. We welcome you here, not only because of the happiness which we hope you may find, but because of the uplifting influence which this convention will have upon education, in our commonwealth. We welcome you to the state which spends one-third of the money raised by taxation for the purpose of education. We welcome you to a state which, last year, spent twenty-two millions of dollars upon her common schools. We speak of this, not because of the amount of money which we spend upon education, but because we feel that it is the kind of men and women that our schools are turning out of which we may be justly proud. We welcome you to a state which is rich, not only in all commercial and financial interests, but rich in that most precious of all possessions—boys and girls. Two millions of our children in years to come will be benefitted by your presence in this beautiful city. We welcome you to a state which carries upon its roll of honor 36,000 loyal, patient, plodding men and women teachers, who are leading these boys and girls along the pathways to noble manhood and womanhood. Thirty thousand of these teachers, let me tell my eloquent lady friend who preceded me, are women. The state of New York trusts these children to her woman teachers, and expects them

to make a class of loyal citizens of her children, and she is not disappointed. We welcome you to a state which is losing no opportunity to elevate, to dignify, and to enoble the cause of education, and the profession of the teacher. Our legislature, thanks to its liberality, stands by the educators of the state in behalf of the professional training of the teachers. When we remember that 30,000 of our teachers are women, who are doing this great work, let us hope that the time will speedily come when the law-making power of this state and the legislatures of all states, and every community, will recognize that other great principle, that so long as woman does man's work equally as well as man, she is entitled to man's wages.

Friends, you have never met in any city where the arrangements have been so complete for your reception, and much is due to the teachers of this city for the perfection of these arrangements. It will not be the fault of your friends in this city if during your stay here you are not made happy and contented. It is our ambition to put a smile upon the face of every visitor, and keep it there, and to fill your hearts with happiness. May your visit here be happy, and may it be a pleasant memory through all your life, and may you receive from the work of your association here, inspiration, strength, and courage for the mighty work which lies before you.

RESPONSES.

NEWTON C. DOUGHERTY, PEORIA, ILL., PRESIDENT OF THE
ASSOCIATION.

Mr. Chairman, Mr. Mayor, and Members of the Local Committee :

It is my official duty, and I surely esteem it a high privilege, to express in behalf of the teachers assembled here, their thankful appreciation of your kind and generous welcome to this great city and this imperial state. Even if these kind words had not been spoken, the careful and thorough preparation made by the local committee at Buffalo assured us, before we left our homes, of the hearty welcome that awaited us here. You have referred to the meeting in this city in 1860, when we were in the shadows of a great civil war. Most of us who come here to-day had not entered then upon manhood, but the men who assembled here in 1860, as the men and women who assemble here to-day, were men whose hearts were warm in the great cause of education. Most of them are at rest, but, as we look over this great land, we know "their works do follow them." Those of them

who are left are here to-day, rejoicing at the widening scope of that great cause to which they have dedicated their lives.

We are glad, sir, to meet in this empire state,—the commercial metropolis of the continent,—a state whose system of public education, from the kindergarten to the university, is the peer of any system in our Union. The state within whose borders was organized the first State Teachers' Association, and the state which gave us the first State Teachers' Journal; a state to which jointly with New England belongs that great American teacher whom we all honor, David T. Page, whose sun went down at noon. And we are not blind to the fact that we meet in one of the richest and fairest cities of the world,—a city around whose name and history are gathered associations that are glorious and hallowed to every true American, a city whose situation has made her the gateway, if not of the nation, at least of the great domain which lies west of the Alleghanies,—a city whose material wealth is only surpassed by the educated hands and cultured minds and hearts of her sons and daughters, who have, by their industry, developed her natural resources, and made her renowned in commerce,—a city that is known all over the land for its beauty and its prosperity. These magnificent avenues along which we have passed, these cultured homes, so many of which have been opened to us, these libraries and these public buildings all tell us, in a way that cannot be misunderstood, that Buffalo desires to transmute her material wealth into intellectual and moral power.

We are here to-day, the representatives of more than half a million men and women who are daily striving to make the youth of this land realize that wisdom is to be prized above rubies. We are here, not merely representing the elementary schools of our towns and cities, and the rural schools of our prairies and hills and valleys, but we are here representative of every interest, from the kindergarten to the university. All of the educational interests of America are represented on this floor to-day. We are here because we realize that education lies at the very basis of all prosperity, national and individual, and that the most sacred interests of society are committed to our care. We have come here seeking the knowledge, the skill, and the culture which will enable us to do our work better. We are proud that we belong to a profession which advances as civilization advances, and that the respect in which the teacher is held in the community is the measure of the civilization of that community.

I thank you Mr. Superintendent, again, for your kind and generous welcome; and now declare the sessions of the thirty-fifth annual meeting of the National Educational Association formally opened.

HON. W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION.

In the name of the National Bureau of Education, I thank you for your kind welcome to this city of Buffalo. We have come here with interest and pleasure to see the great town that stands at the eastern gate of the vast inland sea of North America, just as Byzantium or Constantinople stands at the eastern gate of the Mediterranean. We have come to see the sources of your power and to confer with you on questions of method and policy in education.

The leaders of education have heard of the new departures here in school management and in the higher training of teachers, and they have been looking expectantly to you for an interesting and instructive experience.

In the few days of our visit with you we shall hope to discuss our problems in the light of principles and practical experiments. We are all earnest in our search for an education that will best succeed in helping children to help themselves. We do not intend to raise up a governing class separate and apart from the class to be governed. The people shall be the law-makers and the rulers, and at the same time they shall be ruled by the law, obedient to their self-chosen government and respecting the laws that they have made. The school, we see, best fits for this life of free citizenship, by its strict discipline, its orderly conduct, its instruction in the symbols of thought, its initiation into letters and technical expressions which have been used to preserve the experience and wisdom of civilized peoples.

Two great objects are secured in our elementary, secondary, and higher education. On the one hand the child learns how to conquer and subdue the forces of nature—how to make these subservient to rational ends. Natural science and mathematics place in his hands the mastership over those tools of thought which lay a spell on the organic and the inorganic productions of the world and turn them into wealth and means for spiritual progress. On the other hand education in the school gives the pupil an insight into the nature of his fellowmen. He learns their motives and springs of action, he becomes familiar with their feelings and convictions and the grounds for them. This enables him to step forth as a citizen, able to contribute to the formation of a healthful public opinion and to adopt and execute its behests.

Our school educated population shall be less and less given to sudden gusts of passionate impulse and more and more given to deliberation and conscientious choice of what is good.

Let us rejoice that we are met with you here in these summer days in your delightful, cool, and health abounding city, to confer on the important themes of our profession.

PROFESSOR EARL BARNES, LELAND STANFORD JR. UNIVERSITY,
CALIFORNIA.

There is an empire in the far west, the newest and in many ways the most attractive empire of all time. Along its western coast lie the Sundown Seas in which are cradled the islands of Delight. To the south lies the fabled republic of Mexico, in the north the dominions of Her Majesty, Queen Victoria, stretch an impassable barrier between this fair empire and the snows and colds of the frozen zone. Between you and this most perfect land, stretches the mighty Rocky Range and the great American desert of antiquity.

This natural isolation and the barriers that hem our empire round have led to a process of selection that has peopled this empire with the chosen men and women of the world. The way is so long and the barriers are so great that the lazy and the laggards in civilization's race have never adventured the journey. Strength, or power and wit to use the strength of others, have been demanded of all who would undertake to win this empire for their own. At the same time its treasures have been such, in eternal sunshine, healing winds, rich lands, luscious fruits, and golden ingots, that the bravest and the ablest have been tempted to enterprise the conquest of this new western world. These people are your dearest kin—your brothers and sisters, your children and your dearest friends. In a few years they have built up a civilization as advanced as any you possess. Not only in material enterprise but in matters touching the higher life, this people has done what such selected men and women would be expected to do. Their system of elementary education is second to that of no Eastern or Southern state. They have lavished their money on their children—school houses and universities are their especial pride.

In these last years this people has broken down and bridged over the natural barriers that separated them from you, and to-day they send to you, their kindred and dearest friends, a thousand cordial greetings. To you, our hosts in Buffalo, and to you, representatives of America's standing army of teachers, they send protestations of love and devotion. They are eager for your latest thought, your best advice. They proffer you with open hand whatever they have developed that is peculiarly their own.

These last days I have been pained and grieved to hear in your midst phrases suggesting western secession. I had to come east to hear such suggestions. Let me give you a pedagogical proof of our devotion to the American Union. We have to-day in this western country the idea, which furnishes laughter for the pedagogues of the passing generation—that the best way to learn about the children to

whose service our lives are dedicated is to study these same children as an intelligent man would study his bible or plants, or anything else that he wanted to understand.

Recently one of our most progressive superintendents in selecting reading for his primary classes took the story of George Washington and the cherry tree, and had it told and read to various classes in the leading versions, and then had the children tell it back in oral, and written words and pictures. From these returns he gathered the common elements and put them together representing the primary child's version of the cherry tree story. This story was then printed and there is no more popular story read by the children of California to-day. What stronger proof can I give than that of our loyalty. That country whose children still read with reverence and delight the story of George Washington and the cherry tree, can be trusted to support our glorious Union with our property, our sacred honor, and, if need be, our lives.

ADDRESSES.

HORACE MANN.

BY WM. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION.

The educational history of our country is divided roughly into two epochs—that of rural and that of urban education. This is also the struggle that is going on now—to eliminate rural methods and supplant them by urban methods. For it often happens that a city grows in population, but is slow to avail itself of the opportunity that a large population and accumulated wealth affords for superior methods of instruction.

The number of cities within the United States containing 8000 inhabitants and upwards was in 1790 only 6; between 1800 and 1810 it increased to 11; in 1820, 13; in 1830, 26; in 1840, 44. In the fifty years between 1840 and 1890 it increased from 44 to 443, or ten times the former number. The urban population of this country in 1790 was, according to the superintendent of the census, only one in thirty of the population; in 1840 it had increased to one in twelve; in 1890 to one in three. In fact, if we count the towns on the railroads that are made urban by their close connection with large cities, and the suburban districts, it is safe to say that now one-half of the population is urban.

In sparsely settled regions a district of four square miles will furnish only twenty, thirty, or forty children of school age, and it follows as a matter of course, that the schools are small, their annual sessions very short, the funds to pay teachers scarce, the teachers themselves poorly educated and not professionally trained. For the first forty years of this nation such was the condition of nine-tenths of all the schools. By 1830 the growth of cities began to be felt.

As villages grew, and after the railroads had connected them to the large cities, bringing them into contact with urban life, graded schools began to exist, and to hold an annual session of ten or eleven months. This required the services of a person whose entire vocation was teaching. One of the chief defects of the rural district schools was to be found in the fact that the man who taught the winter school took up teaching as a mere makeshift, depending on his other business or trade (surveyor, or clerk, or farmer, etc.,) for his chief support.

There was small chance for the acquirement of any knowledge of the true methods of teaching. Another evil more prominent than the former was the letting down of standards, caused by the low qualifications of the average committeeman. The town as a whole could afford a school committee of high qualifications; the average district rarely. The township system, therefore, attains a far higher standard of efficiency than the district system.

When the villages began to catch the urban spirit and establish graded schools with a full annual session, there came a demand for a higher order of teacher,—the professional teacher, in short. This caused a comparison of ideals, and the most enlightened in the community began an agitation of the school question, and supervision was demanded. In Massachusetts, where the urban civilization had made most progress, this agitation resulted in the formation of a state Board of Education in 1837, and the employment of Horace Mann as its secretary (June, 1837). Boston had been connected with Providence and Worcester and Lowell by railroads before 1835, and in 1842 the first great trunk railroad had been completed through Springfield to Albany, opening to Boston a communication with the great west by the Erie canal and the newly completed railroad from Albany to Buffalo. This was the beginning of the great urban epoch in America that has gone on increasing in intensity to this day. Horace Mann came to the head of education in Massachusetts just at the beginning of this epoch of railroads and the growth of cities. He attacked with unsparing severity the evils of the schools as he found them, these evils being chiefly the survivals of the rural school epoch. The school district system, introduced into Connecticut in 1701, into Rhode Island about 1750, and into Massachusetts in 1789, was pronounced by Horace Mann to be the most disastrous feature in the whole history of educational legislation in Massachusetts. Side by side with the new impulse given to education in the villages, no doubt the district system seemed very bad. Its evils were manifest in the opposition to central graded schools, which were needed in the populous villages, but which would break up the old district lines. Local power is never given up to a central power without a struggle. The stubbornness of this contest on the part of the local committeemen was continued long after the adoption of the township system in Massachusetts and elsewhere. The district fought for its "rights" through its representatives on the town board, thereby postponing the feasible consolidation of districts and the formation of properly classified schools.

Let us dwell a moment on this advantage of consolidated or "union" schools, as called in New York and the west. In the rural

school, isolated as it was, all grades of pupils from the lowest primary up to the secondary came together under one master, who had to give individual instruction to each, finding only five minutes or a little more for each lesson. Under such circumstances he could not well manage over twenty or thirty pupils. In his classes, each formed of one pupil in those branches other than reading and spelling, he might have done better teaching had he had two pupils instead of one. For the child learns almost as much from paying attention to the efforts of his classmate to recite as from his own. A skillful teacher can make a recitation by an entire class of twenty or thirty pupils of even grade of advancement far more instructive to each pupil than a private tutor can make the same lesson to his one pupil. The other pupils of the class furnish a sort of bridge between the teacher's mind (that sees or should see the topic under discussion in its relations to all human learning) and the individual pupil's mind (that sees the topic in its barest outlines and has scarcely learned its relations to other topics). For each pupil gets some one-sided view of it for himself in preparing his lesson, and sees in the class exercise (which we call "recitation" in our American school technique) many other one-sided views presented by his fellow pupils who are not likely to repeat his one-sided view, but to have others equally distorted of their own.

Suppose two ungraded schools to be united in one and divided again according to grade, the thirty pupils youngest, and in lowest elementary studies, taken by one teacher, and the other thirty pupils taken by the other teacher. One-half of the number of classes is saved by consolidation, and each teacher has twice as much time for each class exercise or recitation. He can find more time to go into the merits of the subject when he has ten minutes instead of five minutes.

In a populous village a school of five hundred pupils is collected. There is a teacher for each fifty pupils, making ten in all. For nearly twice as many pupils can be taught by each teacher in a well-graded school as in an ungraded school. Each of these ten teachers divides his fifty pupils into two classes according to advancement, and classes average a half a year's difference in their intervals of progress from the classes above or below. He has thirty minutes for each recitation. It is now possible to promote a bright pupil, who is not finding enough to do in the tasks set for his class, to the next class above. For he can soon make up what he has omitted by the leap from one class to another. So, too, a pupil who is falling behind his class can take up his work with the next class below and find it better suited to his powers.

It was an insight into this principle that led Martin Luther to insist

on grading the schools. The Jesuits, who were the first to seize on the chief weapon of the Protestants, namely, education for the people, and turn it against them in the interest of the Catholic church, formed a school system in 1590 and also took much pains with grading and classification.

Horace Mann's efforts did not at once abolish the district system in Massachusetts, but it prevailed to consolidate districts in populous sections of the state. His school reports were widely read outside of the state and spread the agitation of the school question into Rhode Island, Connecticut, New York, and elsewhere. Connecticut succeeding in abolishing her district system in 1856, but Massachusetts clung to it until 1869. In this action she was followed by Maine in 1872. And this is what the state superintendent of Maine says of the evils of the district system in an able summary: "First, the school moneys were inequally divided, some districts receiving much more than they could profitably expend, others much less than was absolutely needed; second, poor school houses in remote and sparsely settled districts; third, short schools, or poor ones, if the agent attempted to lengthen them by hiring cheap teachers. Little money, poor schoolhouses, short schools are the necessary attendants of this system."

Horace Mann extended his criticisms and suggestions to the examination of teachers and their instruction in institutes; to the improvement of school buildings; the raising of school funds by taxation; the creating of a correct public opinion on school questions; the care for vicious youth in appropriate schools. He discarded the hidebound text-book method of teaching, and substituted the oral discussion of the topic in place of the memorizing of the words of the book. He encouraged school libraries and school apparatus.

Horace Mann's influence aided in founding the first normal school in the United States at Lexington (afterwards removed to Framingham) and a second one at Barre, both in 1839, and a third one at Bridgewater in the fall of the next year.

Inspired by the example of Massachusetts, Connecticut was aroused by Henry Barnard, who carried through the legislature the act organizing a state board of commissioners and became himself the first secretary of it (1839). In 1849 Connecticut established a normal school. In 1843 Mr. Barnard went to Rhode Island and assisted in drawing up the state school law under which he became the first commissioner, and labored there for six years.

These were the chief fermenting influences in education that have worked a wide change in the management of schools in the middle and western states within the past fifty years.

Let us consider some of those points more in detail and get a little closer to the personality of our educational hero.

There had been in Massachusetts from 1789 to 1839—a period of fifty years—an apparent retrogression of education.

This apparent retrogression was due to the increase of local self-government and the decrease of central, especially parochial authority. It was a necessary and on the whole a healthful movement. The central power had been largely theocratic or ecclesiastical at the beginning. But the reaction against ecclesiastical control went too far in the direction of individualism. The farthest swing of the pendulum in this direction was reached in 1828, when the districts obtained the exclusive control of the schools in all matters except in the item of examination of teachers. The public schools diminished in efficiency, and a twofold opposition began some years before 1828 which took, on the one hand, the shape of an attempt to remedy the deficiency of public schools by the establishment of academies, and, on the other hand, that of a vigorous attack by educational reformers, such as Horace Mann and his devoted contemporary James G. Carter. The establishment of a state board of education, and the appointment of Horace Mann as its secretary, therefore, mark an era of return from the extreme of individualism to the proper union of local and central authority in the management of schools.

Horace Mann's function at this very important epoch was that of educational statesman. We must not permit our attention to be distracted from this point if we would behold the greatness and beneficence of his labors. Pestalozzi was essentially an educational missionary, a teacher of pupils in the first grade of the elementary school.

Horace Mann was equally an educational missionary, for he consecrated himself religiously to the task of promoting the school education of the people. Other people, all people, select vocations in which they are to work and earn a livelihood. But the missionary consecrates his whole life to a chosen work, not for what it will return to him in wealth or honor, but for the intrinsic worth of the object to be accomplished as a good for the human race.

The enthusiasm of Horace Mann shone out of his soul in his praise of the act of the Massachusetts Legislature establishing the state board of education in 1837: "This board I believe to be like a spring, almost imperceptible, flowing from the highest table-land, between oceans, which is destined to deepen and widen, as it descends, diffusing fertility and beauty in its course, and nations shall dwell upon its banks. It is the first great movement towards an organized system of common education, which shall at once be thorough and universal."

It was he that was to succeed in making the state board of educa-

tion the fertilizing spring that he describes. It was a board with limited powers. It could not found schools nor direct or manage them after they were founded. It should only collect information and diffuse it. It could persuade the people but not command them. In a nation founded upon the idea of local self-government, it was a very great achievement to show what can be accomplished by a board that cannot coerce but only persuade. This is the point of view to see Horace Mann's greatness. One thinks of the potency of Peter the Hermit preaching a crusade. It was a crusade that Horace Mann preached in his twelve reports and in his hundreds of popular addresses, and in his thousands of letters written with his own hand.

The first report of Horace Mann, as secretary, was made in 1837, and contains the best statement ever made of the duties of school committees, especially in the selection of teachers. It sets forth the apathy of the people regarding the schools and regrets the employment of incompetent teachers (48 pp).

There was a supplementary report on schoolhouses which discussed the matter of ventilation and warming, the proper kind of desks, the location of the building, the lighting of the room, the playgrounds, and the duties of the teacher in regard to light and ventilation (60 pp).

In the second report, 1838, there is much discussion of the method of teaching reading, whether by letters or by the word-method. A just criticism is made upon the character of the school reading books (60 pp).

In the third report, 1839, he discusses the responsibility of the people for the improvement in common schools, the employment of children in manufactories, the importance of libraries, and the kind of books needed, the effect of reading on the formation of character, and recommends strongly the establishment of school district libraries (52pp).

The fourth report, 1840, points out the desirability of union schools for the sake of grading and classifying the pupils, and cheapening the cost of production. It shows the value of regularity and punctuality in attendance (40 pp).

The fifth report, 1841, has a world-wide fame for its presentation of the advantages of education, the effect of it upon the fortunes of men, the production of property, the multiplication of human comforts and all the elements of material well-being. He showed how education awakened thought, increased the resources of the individual, opened his eyes to the possibility of combinations not seen by the uneducated. The circular letter which he prepared making inquiries of manufacturers and men of business, is the most suggestive letter

of its kind. This report deserves to be published in a pamphlet and placed in the hands of the people of every generation (37 pp).

In his sixth report, 1842, he presents the subject of physiology and its importance as a branch to be taught in the schools (100 pp).

The seventh report, 1843, records his observations in European schools and starts endless questions regarding the methods of organization and instruction, bringing into light questions of corporeal punishment and the over-cultivation of the memory of words. He describes in an eloquent manner the evils of a partial system of education, and treats in a judicial manner the advantages and disadvantages of the schools that he found in Scotland, Prussia, and Saxony (190 pp).

In the eighth report, 1844, he treats of the employment of female teachers and of the method of conducting teachers' institutes, teachers' associations, and the study of vocal music (30 pp).

In his ninth report, 1845, he discusses the motives to which the teacher should appeal; describes the school vices to be avoided; points out the transcendent importance of moral instruction, and shows how obedience should be secured by affection and respect and not by fear. He treats of the dangers of truancy and the prevention of whispering, and a variety of practical difficulties that meet the teacher in the schoolroom, and shows how to avoid the evils of emulation, and commends the system of instruction by induction instead of deduction; and the importance of substituting investigation for memorizing (104 pp).

The tenth report, 1846, gives the history of the common school system in Massachusetts, and shows the relation which education holds to the future generations of the commonwealth (35 pp).

The eleventh report, 1847, makes a strong presentation of the power of the common schools to redeem the state from social evils and crimes. There is a circular letter of inquiry with regard to the effect of education in the prevention of vice and crime. The letter of 1841 had inquired regarding the effect of education upon thrift and industry. The replies obtained to the letter of 1847 gave encouraging facts and opinions in regard to the moral effect of school education. The report continues to discuss the qualifications of teachers and the methods of securing regular attendance of children, and paints a picture of the effect of universal education:

"Every follower of God and friend of human-kind will find the only sure means of carrying forward the particular reform to which he is devoted, in universal education. In whatever department of philanthropy he may be engaged he will find that department to be only a segment of the great circle of beneficence of which universal education is the center and circumference" (80 pp).

The twelfth and last report of Horace Mann, presents anew the

capacity of the common-school system to improve the pecuniary condition and elevate the intellectual, moral, and religious character of the commonwealth, repeating with new force the arguments brought forward in previous reports. He shows the importance of religion and the reading of the bible in the common school; shows the importance of health, and the necessity of providing for physical training in the school room; sets forth the necessity of the schools for the political education of the citizens. His devices to show the use of intelligence gained in the schools to the mechanic, the merchant, and the farmer, seem inexhaustible (120 pp).

As a consequence of the seventh report, which sets forth the advantages of the schools of Germany, there arose the famous controversy with the thirty-one Boston schoolmasters.

In studying the records of Massachusetts one is impressed by the fact that every new movement in education has run the gauntlet of fierce and bitter opposition before adoption. The ability of the conservative party has always been conspicuous, and the friends of the new measure have been forced to exert all their strength, and to eliminate one after another the objectionable features discovered in advance by their enemies. To this fact is due the success of so many of the reforms and improvements that have proceeded from this state. The fire of criticism has purified the gold from the dross in a large measure already before the stage of practical experiment has begun. In reviewing this long record of bitter quarrels over new measures that have now become old and venerable because of their good results in all parts of the nation, we are apt to become impatient and blame too severely the conservative party in Massachusetts. We forget that the opposition helped to perfect the theory of the reform, and did much to make it a real advance instead of a mere change from one imperfect method to another. Even at best, educational changes are often only changes of fashion, the swing of the pendulum from one extreme to another, and sure to need correction by a fresh reaction. Again, it is patent in Massachusetts history that the defects of old methods were in great part remedied by the good sense and skill of many highly cultured teachers who still practiced them, and hence the wholesale denunciation of the old methods was felt to be unjust. The best teachers resented the attacks on their methods. It seemed unfair, because it charged against the method all the mistakes committed by inexperience and stupidity, and because, too, it claimed more for the new device than could be realized. The old was condemned for its poor results in the hands of the most incompetent, while the new was commended as an ideal without considering what it would become in the hands of unfaithful teachers.

Take as an instance of this the use of text-books. Every one will admit that what is called the "slavish use" of such means is a great evil. The memorizing of words and sentences without criticism and reflection on their meaning is a mechanical training of the mind and fit only for parrots. But, on the other hand, the proper use of the printed page is the greatest of all arts taught in the school. How to get out of printed words and sentences the original thought and observation recorded there—how to verify these and critically go over the steps of the author's mind is the method of discovery and leads to the only real progress. For real progress comes from availing one's self of the wisdom of the race and using it as an instrument of new discovery. That other method, sometimes commended, of original investigation without aid from books forgets that mankind have toiled for long thousands of years to construct a ladder of achievement and that civilization is on the highest round of this ladder. It has invented school education in order that its youth may climb quickly to the top on the rounds which have been added one by one slowly in the lapse of ages. The youth shall profit vicariously by the thought and experience of those who have gone before. For the child of the savage tribe there is no such vicarious thinking and living; he begins practically at the bottom of this ladder and with no rounds on which he may climb.

Now there was in Massachusetts and elsewhere much excellent teaching in the academies and common schools—teaching which trained the pupils to criticize and verify, instead of accept the statements of the book with blind credulity. The good teachers knew that their methods were good, and felt indignant to hear them caricatured and an inferior method recommended as a substitute.

For the merely oral method does not possess in it the capability of producing the independent scholar who can be trained by holding him responsible for mastering critically the printed page, and making alive again its thoughts and perceptions.

It was a sense of something valuable in the old method which was not touched by the criticisms of Horace Mann that led to the reply of the Boston masters.

Here we come to the closer view of the character of Horace Mann. He was like so many of the great men of the Puritans, modeled on the type of the Hebrew prophets. The close and continuous study of the characters portrayed in the Old Testament, the weekly sermons, most of which were studies of those characters, had educated all Puritans to see ideals of character in ancient leaders who devoted themselves to a cause and withstood popular clamor, fiercely denouncing whatever form of idol worship they saw among their countrymen.

The ideal of a strong, serious-minded, independent manhood, unswerved by personal interest, thoroughly patriotic and devoted to the public interest, draws its support from a sense of righteousness that gives it a backbone coterminous with the axis on which the universe revolves. So long as this character is recognized and respected, and has in the main the support of the community, small and great, it stands firm like an oak, and thrives on the hostility of the elements in the society that it opposes.

But this species of character modeled on the Hebrew prophets, it should be said, is far more likely to be an inward tragedy than a genuine historical one. The average man puts on the air of a censor of his age or his community, and develops an overweening egotism, or he poses as an unappreciated genius for poetry, or philosophy, or philanthropy, or statesmanship, or theology, or ethical purity of character.

The pathway of history for eighteen centuries is strewn with wrecked individualities of men who have become fanatics or cranks through the demoniac possession of a single idea, and the self-delusion—a suggestion of the evil one—that they are exceptionally wise and gifted above their fellow-men; that they, in short, are right and the world is all wrong.

It is saved from being a tragedy in Horace Mann and in other great men before and after, who have personified this Hebrew prophet type of reformer, by the greatness of the cause they have espoused and by their self-sacrificing devotion to it.

The great Teacher gave the one prescription to ward off the fatal disease that attacks this Hebrew individualism and that prescription is humility and self-abasement. Its intellectual rule is the measure by service of one's fellows; be their servant if you would rule over them. But we have from this ideal the most important fruition of all human history, namely, the development of individualism and the formation of a set of institutions to nurture it. We have characters that are so strong that they can withstand any amount of opposition from their fellow men and still hold themselves erect without fear. "One with God is a majority."

Thus Horace Mann was intrenched in this fundamental principle and on all occasions returned to it to rally his strength. In his own words he describes his convictions and at the same time lays down the details of his policy and methods of winning success.

"The education of the whole people, in a republican government, can never be attained without the consent of the whole people. Compulsion, even if it were desirable, is not an available instrument. Enlightenment, not coercion, is our resource. The nature of educa-

tion must be explained. The whole mass of mind must be instructed in regard to its comprehension and enduring interests. We can not drive our people up a dark avenue, even though it be the right one; but we must hang the starry lights of knowledge about it, and show them not only the directness of its course to the goal of prosperity and honor, but the beauty of the way that leads to it.

"In some districts there will be but a single man or woman, in some towns scarcely half a dozen men or women, who have espoused this noble enterprise. But whether there be half a dozen or but one, they must be like the little leaven which a woman took and hid in three measures of meal. Let the intelligent visit the ignorant day by day, as the oculist visits the blind man and detaches the scales from his eyes, until the living sense leaps in the living light.

"Let the zealous seek contact and communion with those who are frozen up in indifference, and thaw off the icebergs wherein they lie embedded. Let the love of beautiful childhood, the love of country, the dictates of reason, the admonitions of conscience, the sense of religious responsibility be plied, in mingled tenderness and earnestness, until the obdurate and dark mass of avarice, ignorance, and prejudice shall be dissipated by their blended light and heat."

He preached the same doctrine regarding the right of the state to educate at public expense that James G. Carter had preached. It is stated in these simple propositions:

1. "The successive generations of men taken collectively constitute a great commonwealth."
2. "The property of the commonwealth is pledged for the education of all its youth up to such a point as will save them from poverty and vice and prepare them for adequate performance of their social and civil duties."
3. "The successive holders of this property are trustees bound to the faithful execution of this trust by the most sacred obligations; and the embezzlement and pillage from children and descendants have not less of criminality, but far more than the same offences when perpetrated against contemporaries."

The net results of Mr. Mann's labors in his great career as educational statesman is put tersely by Mr. Martin in these words: "In the evolution of the Massachusetts public schools during these twelve years of Mr. Mann's labors:

"Statistics tell us that the appropriations for public schools has doubled; that more than two million dollars had been spent in providing better schoolhouses; that the wages of men as teachers had increased 62 per cent., of women 51 per cent., while the whole number of women employed as teachers had increased 54 per cent.; one

month had been added to the average length of the schools; the ratio of private-school expenditure to those of the public schools had diminished from 75 per cent. of the whole amount to thirty-six per cent.; the compensation of school committees had been made compulsory, and their supervision was more general and more constant; three normal schools had been established, and had sent out several hundred teachers, who were making themselves felt in all parts of the state."

(Martin's Ed. in Mass., p. 174.)

In conclusion I suggest again the thought of Mr. Mann as a character inspired with missionary zeal to reform society by means of the school system. It was this missionary zeal that led him to advocate in the Massachusetts legislature the first insane asylum, and secure its establishment; to favor the establishment of asylums for deaf and dumb and blind; to secure normal schools, humane school discipline, methods of instruction that appeal to the child's interest and arouse him to self-activity, and finally to devote the evening of his life to the Antioch College experiment.

It is this missionary zeal for the school that works so widely and in so many followers to-day. What enthusiastic teacher is not proud to be called a disciple of Horace Mann?

BY HON. NATHAN C. SCHAEFFER, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, PENNSYLVANIA.

Horace Mann was a great man. On both sides of the Atlantic he is known as the great educator of America. Is it money that makes men great? Then we should read of Vanderbilt the Great, and Rothschild the Great. Is it learning? Then, indeed, we should read of Leibnitz the Great, and find the surname attached to the names of university professors. Is it political preferment? Horace Mann held office in Massachusetts and occupied a seat in Congress, but if he had no other claim to greatness, his name would have been buried in oblivion like that of many another who has graced, or perhaps disgraced the halls of legislation.

The men who have been surnamed Great on the pages of history were men like Gregory the Great, and Leo the Great, who made themselves felt through the church. Or men like Alexander, and Charles and Frederic, who made themselves felt through the state. The church and the state were the only channels through which a son of genius could reach the masses, until Horace Mann opened a new channel through which a man can mould his age and nation, namely, the school.

And again, "However loftily the intellect of man may have been gifted, however skillfully it may have been trained, if it be not guided by a sense of justice, a love of mankind, and a devotion to duty, its possessor is only a more splendid, as he is a more dangerous, barbarian."

And again he says, "I find that for one man who has been ruined for want of intellect or attainments, hundreds have perished for want of morals. And yet, with this disproportion between the causes of human ruin, we go on bestowing at least a hundred times more care and pains and cost in the education of the intellect than in the cultivation of the moral sentiments and in the establishment of moral principles." The course of study in the schools needs enriching on the sides of the heart rather than the head. It should be enriched with great thoughts and noble sentiments drawn from the wisdom of past ages. More than this it should be enriched by the cultivation of those everlasting principles of right, justice, honor, truth, which are the foundation of the American state, and in the inculcation of which lies the only sure safeguard of our American homes.

This great lesson of the exalted supremacy of the moral over the intellectual, taught in the writings of Horace Mann, the all-pervading thought, that as we strengthen the intellect we must also quicken the conscience, that as we add to the impulsive, we must also add to the regulating forces, ought to be learned not only by the American public, but by the American teacher. If we fail to give due prominence to the cultivation of the moral and religious nature of the child, the fate which has always overtaken godless nations will overtake the American Republic. A highly intellectual class with no love of man in their hearts, at one extreme of society, and an ignorant, depraved class at the other, with no fear of God before their eyes, is like a thousand pounds of dynamite in the community, beside which stands the demon of discord and anarchy, with uplifted hammer, and blazing torch, ready to explode it at a moment's notice.

The words of Horace Mann are as applicable to-day as when he uttered them:

"Educate your children. Educate them in the great eternal principles of justice and right which underlie the entire length of human existence."

BY F. LOUIS SOLDAN, SUPERINTENDENT OF SCHOOLS, ST. LOUIS, MO.

[STENOGRAPHIC REPORT]

Mr. President, Ladies and Gentlemen:

Not only the man, but the year that we celebrate, is an important one in the history of our country. The one hundredth anniversary of the birth of Horace Mann,—in one sense, the creator of the modern system of education,—1896, is also the one hundredth anniversary of another event which seems at first disconnected with the memory of Horace Mann, namely the arrival of the West in American history, as a political power, in the organization of Tennessee as a state and the election of Andrew Jackson as the first senator from that region. There is a connection between the two, for they represent two forces on which our government rests and shall endure,—power and intelligence. We celebrate 1896 as the fiftieth anniversary of that culminating decade in the life of Horace Mann when the effect of his labors and the meaning of his teachings began to be felt. Early in the century there was no such a land as we now proudly call the United States, a country surpassing in extent and power any nation on the face of the globe. At the beginning of the century there were the old thirteen colonies, limited on the west by the Alleghenies, but our country looked westward, and embraced many broad plains and great rivers leading down into new lands; but no pathway had been opened, and it seemed as if that country was a hopeless field for our pioneers. It was a short time before the culminating period in the life of Horace Mann that great changes were taking place; inventions began to appear, and steamers plowed their proud way through the rivers and carried the commerce of the east into the new lands. Ocean navigation had just begun, and a new future opened. There were to be millions of the poor and oppressed of Europe that were to bear down upon the fields and flowers of the west, millions who were to live there in the future, and the question of what this new nation was to be was hanging in the balance. It was due to the influence of Horace Mann that a new impulse was given to the spiritual side of our development, and a new element in education introduced. The well-trained teacher became the hope of the nation. With Horace Mann began the era in which education in our country was so perfected that European emigrants, became, in a single generation, good and patriotic American citizens. It was Horace Mann who, in a spiritual sense, realized the declaration of Jackson,—“The Union must and shall be preserved.” It was Horace Mann who, in a spiritual sense, furnished the means, through education, to preserve, perpetuate, and extend the United States, so

that now there is but one people, and one national educational hero—Horace Mann.

We are grateful to Horace Mann in another respect. He lent a new meaning to the profession of teaching. He redeemed it from the curse of a temporary occupation, which cannot enlist the life devotion of man or woman. It was he who, through the idea of a normal education, laid the foundations of the profession of teaching. If to-day in every school-room of the land better methods prevail, if in every school-room almost, either by imitation or by direct agency, the careful training of teachers in normal schools has had its effect, it is owing in no small measure to the man whose memory we celebrate. In every school-room in the country, in every teacher's room, in every school-house, there is an echo of the good that Horace Mann did for the whole world.

BY AARON GOVE, SUPERINTENDENT OF SCHOOLS, DENVER, COLO.

[STENOGRAPHIC REPORT]

In view of the length of the exercises and the lateness of the hour I beg leave to print rather than talk.

Probably never before in the history of the world could exercises like the present have occurred. Those connected with educational work at the present time may well be encouraged. Just now as the history of education assumes a place in the literature and studies of the country, one begins to learn something of these old schoolmaster heroes, like Comenius, Pestalozzi, Rousseau, Froebel, and others; and ten thousand come together today to listen to eloquent words pronounced to the memory of one eminent leader in American education, who was an active force during the middle of the present century.

After listening to eloquent men who have preceded me, I have no disposition at this hour to continue. Able speakers are yet to follow. But I am unwilling to refuse to participate on this occasion. It is an honor to be here,—an honor that is unprecedented. For the first time in the history of this association, in the educational history of the country, people are aroused to commemorate the life of an eminent schoolmaster. Let us trust that this is the beginning of a movement toward an intelligent respect for the teacher, and that it will continue until no walk in life shall receive the attention of the American people to a greater extent than that of teaching.

BY JAMES M. GREENWOOD, SUPERINTENDENT OF SCHOOLS, KANSAS CITY, MO.

Into the picture which represents Horace Mann as he was in the flesh, I have gazed long and often. Back of the eyes an immortal fire glows more brightly with every step towards the tomb. Written in every lineament of his face is "live for the truth." His life was one of remarkable fullness. He stands before us as the colossal figure in the American system of public education. No teacher of this country can contemplate his life, his great study, and still greater thoughts and actions, without a strong feeling of energy and enthusiasm taking deep root in his soul. So much of his life, too, was passed in the glare of publicity that it resembles not a single portrait, but rather a series of pictures in a well-arranged gallery. His mind had two compartments, an interior and an exterior one. But who can paint the spiritual atmosphere of a noble life? We contemplate the picture in both, and from the composite construct the man. Within the inner chamber of his soul all the terrible conflicts of his nature—the passions, the tragic situations, the fierce struggles of conscience—were fought out and then actualized in the presence of men. His character is one of the noblest and boldest in history. Neither Alps nor ocean could lie between him and a moral duty. He belonged fully to himself. Having once determined upon the right, he consecrated all the energies of his ardent nature to its accomplishment. His deliberations banished fluctuation from its purpose. He moved straight forward with a firm will and a steady tread. There is no evidence that he ever sat still after he once determined on a course of action. His motto may be expressed, "I am linked to my determination with iron bands; my purpose is become my fate, and I must accomplish it, unless arrested by calamity or death."

Flung into poverty as a little child, forced to work laboriously and incessantly, a stranger to recreation, tormented by a dreadful theology, yet stirred to the very depths of his nature by a fire that was unquenchable, it is no wonder that he moved through life with a determination that shaped circumstances into harmony with his purposes. When he explained his thoughts to the people, they saw that his processes were clear and his plans feasible. Amid the strongest opposition and the most stinging criticism, he stood erect in the dignity of his manhood, and answered his adversaries from a mind stored with information which had been drawn from every department of learning and every phase of individual experience. A more resourceful mind, rich in the deepest instincts of humanity, keenly alive to every species of oppression and ignorance, nerved with an unflinching

belief in the endless progression of the race, moved by massive energies working along those lines of fixed and eternal purposes of right, was never enlisted in a nobler cause. It was the inherent power of educated genius.

His was a mind that no misfortune could intimidate or repress, but which forced itself into the most violent states of impetuous activity, and then, as if doubly nerved, moved forward in its appointed course, regardless of public opinion, or the pitiful praise of time-serving dependents. His character was a noble one, not imperious and unmindful of the rights, feelings, and sympathies of others; but high and dignified. His knowledge of the world in its survey of mankind softened into a charity which was as noble as it was sublime.

At the fountain of his soul there was a seriousness which never once trifled with the interests of humanity. In the discussion of any subject whatever his character could be traced from the strong convictions within to the actions without. From a firm belief in his judgment he uttered the deepest sentiments of his heart. Incased in a fragile body, his mind never had time to be idle, but an all consuming desire for knowledge fired his soul from childhood until death. To do something nobler and better for humanity than had ever been done before was the mainspring of his life. To break the shackles that bound body and soul, he struck at error and wrong with the massive power of a giant, and the fiercer the conflict the more brilliant and powerful was the exhibition of his strength. Principles, duty, gratitude, affection he held to as the cardinal doctrines of life. A slave to no habit, he condemned in the teacher the use of tobacco and alcoholic drinks, thus anticipating by more than half a century the radical action of the Methodist church. But the remarkable power of Horace Mann is not in the new doctrines he taught, so much as in gathering up isolated fragments of information scattered here and there, and embodying them in a series of the most charming and profound lectures that ever teemed from the brain of man. The warmth of feeling, the irresistible logic, the wealth of imagery, the marshaling of illustrations from all departments of learning and fields of industry had never before revealed such precious stores of information to the teachers of children. It was not the definite how, but the positive is, that he pleaded for in order to help the children of men. The fiery enthusiasm which thrilled and filled his nature he communicated to others. A stronger moral force never wrought its way into the heart of a nation. As I pondered over his reports, followed his apt illustrations, weighed the matchless power of his logic, as he welded argument to argument, in building up a structure that could not be demolished,—then, indeed, did I feel that in this child of poverty and suffering,

Massachusetts had given birth to one of the most gifted and grandest characters of earth.

He is the only soul-inspiring writer on education that America has yet produced. The sweep of his mind embraced God's universe, focused on the child. The meshes and intricacies of detail he left to the plodders, the observers, the statisticians. From the richness of his own experience he believed implicitly in the highest possibilities of human development and the ultimate happiness of mankind. Inspired with these lofty ideals, he painted in words that will ever fire the hearts of teachers. Everything for the child, was his text. This idea had taken complete possession of him, and there it remained to take its flight with him from earth.

He had a kindly way of suggesting, not teaching; of putting things into one's head, and then leaving them there to work their way out. Read to live, not live to read, was the nourishment of his soul. Higher knowledge was the great ocean of truth to him. Words are feeble things with which to portray such a character.

"After journeying together for so many years on our passage through life," said he to the young pupils of Antioch College, "we are about to part. Another day, ay, another hour, and we separate. Would to God I could continue this journey with you through all its future course. There is no suffering of a physical nature which I could survive, that I would not gladly bear, if thereby I could be set back to your starting point, to the stage of life where you are now standing. When I think, after the experience of one life, what I could and would do in an amended edition of it; what I could and would do, more and better than I have done, for the cause of humanity, of temperance, and of peace; for breaking the rod of the oppressor; for the higher education of the world, and especially for the higher education of the best part of it,—woman,—when I think of these things, I feel the phoenix-spirit glowing within me. I pant, I yearn for another warfare in behalf of right, in hostility to wrong, where, without furlough, and without going into winter quarters, I would enlist for another fifty years' campaign, and fight it out for the glory of God and the welfare of man.

"But, alas! that cannot be; for, while the phoenix-spirit burns within, the body becomes ashes. Not only would the sword fall from my hand, my hand would fall from the sword.

"What, then, can I do? Can I enshrine my spirit in your hearts, so that when I fall in the ranks (as I hope to fall in the very front ranks of this contest), and when my arm shall no longer strike, and my voice no longer cheer, you may pursue the conflict, and win the victory?"

Thus we behold a second Socrates dying like a God.

HORACE MANN AT ANTIOCH COLLEGE.

BY W. A. BELL EDITOR *Indiana School Journal*, INDIANAPOLIS, IND.
A STUDENT UNDER HORACE MANN.

Horace Mann accepted the presidency of Antioch College at Yellow Springs, Ohio, believing that in a new college, in the new West, free from established customs, he could most easily carry into effect certain theories he held in regard to higher education.

Before accepting the place he wrote to Rev. Eli Fay, who was urging him to accept, and said, "The two great ideas which win me to your plan are: First, that of redressing the long-inflicted wrongs of woman by giving her equal advantages of education. I do not say in all respects identical education, but equal advantages of education with men.

"And, second, the idea of maintaining a non-sectarian college. I have always had the deepest aversion to sectarianism, and to all systems of proselytism among Christian sects. I would enlighten the human mind with all true knowledge and with science. I would repress the growth of all evil propensities and desires; and in doing this work I would take the gospel of Jesus Christ as my text book, and the life of Jesus Christ as my example. In this way I would endeavor to train up children in the way they should go. As far as possible, I would prepare every human being for that most important of all duties, the determination of his religious belief for himself."

These were the fundamental principles written in the charter of the college, and Horace Mann gave them their first concrete embodiment. In this same letter he argued that an institution which admitted both men and women as students should have both men and women in its faculty. And he insisted that if the women did equal work they should have equal pay.

Up to the time of opening Antioch (1853), Oberlin was the only college that had opened its doors to women; but, while it admitted them, it did not offer them equal advantages. Its "ladies' course" lacked a great deal of being equal to its regular course for men. It is true that a few women had been permitted to take the regular course; but this was a special favor.

Women were not provided equal educational advantages in those days for two reasons: First, it was thought that they, in their sphere of work, did not need as much education as men needed. And, second, it was thought that they had not the capacity to receive it. Both these propositions Mr. Mann denied, and in Antioch College demon-

strated their falsity. Co-education was at this time looked upon with much suspicion, and Mr. Mann himself always referred to it as "our great experiment."

Under the presidency of Horace Mann, Antioch College was the first college in the world to offer to women absolutely equal educational advantages with men. Antioch never had a "ladies' course" of study. Antioch was the first college in the world to admit women to its faculty. Its first faculty contained two women. Antioch College was the first in the history of the world—and the last, for that matter—to be built and endowed by a religious denomination which placed at the head of it a man not a member of that denomination. Mr. Mann, however, thoroughly endorsed the fundamental principles of the church, viz.: "Christian character the only test of church membership; and individual liberty in the interpretation of the scriptures." No man ever found fault with Mr. Mann's religious opinions who himself really accepted these views. The truth is, Mr. Mann was one of the most profoundly religious men I have ever known.

Antioch College was the first college, outside of medical colleges, to introduce into its regular course the study of physiology and hygiene. Mr. Mann believed that the violation of a physical law was as much a sin as was the violation of a moral law. He looked upon both as God's laws.

Antioch was the first to discard the use of prizes. When a Boston friend sent Mr. Mann a sum of money to be used in prizes, he answered that he could not use it. He said that he did not dare to offer so low a motive as money as a reward for faithful effort.

Antioch was the first college to make good moral character an essential to graduation. Mr. Mann looked upon a diploma as a certificate of character, as well as a certificate of scholarship. It was understood from the first that he would not give a diploma to a person whose moral character he could not vouch for.

Antioch was the first college to establish a chair of pedagogy. Page's "Theory and Practice of Teaching" was an adopted textbook in Antioch's first curriculum. Mr. Mann was the first college president to concede that the degree A. B. should be awarded for a given amount of culture, rather than for the study of certain specified branches; and so Antioch was the first college to provide an "elective course" of study—something found in all colleges to-day.

Mr. Mann died in 1859, having served as president just six years. The average attendance at this time was about 300, one-third of whom were women. These young people, for the most part, were persons drawn by Mr. Mann's prominence as an educator, and his special views in regard to co-education. They were persons of more than

the average age of college students, and of more than average intellectual ability; uncultured, to be sure, but eager to learn.

No other college president ever had before him a more susceptible body of students; and no other body of students ever had over them a more honored president, or one with greater power to impress himself. Those six years were years of sacrifice, filled with many petty annoyances and grievous disappointments to Mr. Mann; but at the same time they were years of great victory for the causes for which he was laboring. In those six years he did more for the higher education and for the elevation of women, than any other man, in any other place, ever did in a quarter of a century. In those six years he demonstrated to the world that men and women can be educated together with mutual advantage to both intellect and morals. In those six years he did more than any other man in a generation to demonstrate that women have equal intellectual capacity with men. In those six years he showed how a college can be Christian in the best sense in which that word can be used, and at the same time not sectarian. In those six years he did much to prove that conduct and character, rather than opinion, are the essential things in this life. In those six years he impressed his high ideals upon hundreds and hundreds of young people in such a way as to change the entire character of their after lives. His power to inspire was phenomenal. In those six years, outside college walls, in educational meetings and on the lecture platform, in Ohio and other western states, by his magical power as a speaker he stimulated thousands of people to nobler thinking and higher living. In those six years he imbued Antioch College with a spirit that still pervades it; which stimulates to higher aims and nobler purposes every one who is brought within its influence. Those six years were a glorious climax to one of the grandest lives this world has ever known.

Horace Mann shared the fate of all the saints of the past, who have lived in advance of their age, and have had the courage of their convictions,—he had enemies. He was cannonaded while living, and is canonized being dead.

PRESIDENTIAL ADDRESS.

*DO OUR PUBLIC SCHOOLS MEET REASONABLE
EXPECTATIONS?*

BY NEWTON C. DOUGHERTY, SUPERINTENDENT OF SCHOOLS, PEORIA
ILL.

Man is considered a reasoning being. It is sometimes said that this attribute differentiates him from the lower animals. And there is certainly much inspiration in the thought that man has the power to discern relations,—to see how one fact or principle is the logical antecedent or consequent of other facts or principles. The possession of this power is surely a mark of greatness, of exalted standing in the universe.

But how often we find that this grand power seems to be subordinated in the human mind to other influences. In how many minds is this reasoning process vitiated by environment, by desires, and by selfish interests. There is a difference in this respect in the constitution of man. In some the reasoning faculty has more of regal power than in others. But it must be confessed that in most minds the force of the syllogism whose conclusion falls in with our wishes, or is helpful to some interest of our own, is more readily appreciated than it otherwise might be.

This lack of reasonableness is exhibited in the expectations that men indulge concerning forms of government, codes of morals, and systems of education. Concerning each of these we are liable to be more or less dominated by preferences. These preferences may be due to something in our experience, to the probable effect of the proposed system upon some private interest of our own, or to some cherished theory previously entertained in the mind. The enthusiastic advocates of such systems are liable to expect from them impossible benefits; and the opponents of the system denounce them for not accomplishing such impossibilities.

For example, what expectations have been cherished concerning the good to be derived from a democratic form of government. It is sometimes assumed that the mere establishment of a democracy would necessarily result in a marvelous elevation of the citizen, physically, intellectually, and morally. As philanthropists have observed the tyrannies exercised by monarchs,—as they have seen that many times for the gratification of one man's unhallowed ambition many thousands of

men have been slain, vast areas of country have been desolated, women and children have been sacrificed, and a multitude of nameless horrors have been perpetrated,—as men have observed these things, they have become profoundly impressed with the evils attendant upon monarchy. It has seemed to them clear that the remedy for these evils is the abolition of that form of government, and the substitution of popular rule. In their distress they have raised the question “How shall these evils be remedied?” And the answer has come to them like an inspired prophecy: “Take the power out of the hands of the tyrant and give it to the sufferers. Let the millions who are liable to be drafted into the tyrant’s army—let these be endowed with the right of suffrage. Let them be crowned kings. Yea, if need be, let the women, whose sufferings by reason of war are so terrible, let them have a share in the rulings of the nations.” And in their noble zeal this improved form of government appears to them the panacea for all the ills that flesh is heir to. They expect as results from it a stronger, cleaner, and nobler manhood; a lovelier, stronger, and more virtuous womanhood. And unquestionably in the main their expectations are well founded. Other things being equal, a free government does develop a nobler type of humanity.

But democracy is not a panacea. It is an agency which, if rightly used, may do great good. But the history of the world has abundantly shown that democracies may be accompanied by direst depravity. The absolute monarch has often been dominated by a spirit of unmitigated selfishness. He has often been keenly alive to the preservation of his own prerogatives, and careless about the condition of the multitudes under his rule. But he has not held a monopoly of these unlovely qualities. The history of Athens, where democracy is considered to have put on its most charming form, shows that sometimes the real friends of the community were the aristocrats, while the selfish and quarrelsome Demos produced confusion and every evil work. “The power attained by the Athenian democracy was, at times, arrogantly and harshly used; its sovereignty was exercised without generosity or restraint. The last of the great leaders of her golden age died when her need of him was greatest, and her citizens were given over to demagogues who beguiled them to the ruin of the republic.” Democracy is a good thing, but mere democracy cannot save a people. Those who expect from free government the abolition of all evils, social and other, are doomed to disappointment; and those who denounce free government because it does not accomplish these impossibilities are unreasonable and unjust.

It has recently been made very apparent by an eminent writer upon educational matters in the United States that democracy does not

even tend to produce equality of outward conditions among the people of a country. Because its principal function is to secure absolute freedom of action among the people, so far as may be compatible with the public good, for that very reason it promotes inequality of outward conditions. Only by the exercise of the veriest tyranny can inequality in wealth be prevented among the people. One man is industrious; another is not. One man sees the financial value of an enterprise, while another for the lack of the requisite natural endowments fails to see it. Now, if full freedom is to be given to each of these parties, it requires no prophet to foresee that in the end their outward conditions will not differ. And yet many talk about democratic equality as if it meant that every man's bank account should be the same as every other man's. The expectation that these outward conditions shall be equalized by a free government is unreasonable.

The same lack of reason has been exhibited in respect to the Christian religion and the system of morals involved in it. Results that even omnipotence could not bring about have been confidently promised, and Christianity has been stoutly abused because these dreams have not appeared as realities.

And it is not strange that the same conditions exist with respect to our educational systems. Indeed, it would have been strange were it otherwise. If unreasonable expectations had not been entertained concerning our schools, and concerning the results produced by them, and if unreasonable criticism had not been made because these impossible results were not secured, then, indeed, there would have been need for explanation. The philosophers would have had a difficult problem to solve. But that difficulty does not exist. Our schools have shared the fate, in this respect, of other agencies for the improvement of mankind. Take for an illustration our free-school system. Its advocates have given us glowing pictures of the good to be accomplished by it. Some of the noblest men that our country has produced have given to this enterprise their lives, as well as the inspiring influence of their grand moral and intellectual endowments. These men believed in the worth of free schools. They thought the nation was to derive great benefits from them. Horace Mann declared that the getting of an education and the saving of a life were of just about equal importance; and of course when he contemplated the thought of making it possible for all the children of the land to acquire something of an education, it must have seemed to him like the saving of many lives. This thought became contagious, as all intense forms of thought and feelings are likely to become. Earnest men, noting the blighting effects of ignorance, observing how the undeveloped mind becomes the slave of superstition and the plaything

of delusions, and also noting how amid the darkened chambers of the untutored brain evil is so likely to nestle, corrupting the entire being, —noting all this, it is not strange that these educational reformers magnified somewhat the good to be accomplished by the schools; that they expected from them some results which the outcome has not realized.

The problems to be solved in the United States, intellectual, ethical, and social, are the gravest that have ever confronted men. This vast country of ours furnishes an ample field for the exercise of every faculty, and the indulgence of every propensity of which man is capable. "No pent-up Utica contracts our powers" either for good or for evil. If a man has within him the impulse to right living, here is a magnificent field for its exercise. If, however, the energies within him make for evil, the opportunities for their corrupting influence are equally numerous and far-reaching. We have a splendid field for all forms of activity, and humanity abundantly furnishes all these forms. The history of our country has made us familiar with the loftiness of character exhibited by the New England Pilgrims. Many a glowing tribute has been paid to their virtues. But was there no evil in the Puritan? If there was the nation has furnished countless channels through which its poisonous current might flow. But the Puritan has not had the field to himself. Mighty influences, both for good and for evil, have also gone forth from the southern colonies. Nor is this all. For the last hundred years, and especially during the last quarter of that period, almost countless numbers of immigrants from almost every nation on the face of the earth have sought the blessings of American liberty, and the opportunities of our great republic. And what has been the character of this immigration? It is pleasant to record that much of it has contributed to the uplifting of American society. Men and women from Europe have helped to educate us Americans in literature, in science, in art, in the science of government. Many others have contributed to our material prosperity by the work of their hands, aiding in the construction of our canals and railways, and in otherwise promoting our material prosperity. But a multitude of these incomers have been able to render us very little service except in calling forth our energies in providing for their needs. Their grade is low, intellectually and ethically. They come or are sent here to better their means of subsistence, a process which is calculated to elevate the winnowed condition of their people who remain at home as much as it is to depress the average of our own. These great tidal waves of drifting population will continue to flow to our shores as long as men and women are attracted by our free institutions, by free homesteads, by free public schools, and by higher

wages. They claim this their home, for weal or woe, and in many of the states they are permitted to exercise the privilege of citizenship about as soon as they are domiciled. Their coming has rendered more difficult the social problems which we are called upon to solve.

This mixed multitude of people is encountering serious trials, also, on account of its environment. A new continent opens before them its boundless resources. It seems possible here to gratify every wish, to satisfy every desire. The man of noble aims and lofty ideas finds here an inspiring opportunity to work for the good of mankind. He sees the magnificent possibilities of these new communities. He is stirred by the hope of excluding from them the evils that elsewhere afflict mankind. Thus every philanthropic energy within him is called forth. All this helps to develop him into the highest type of mankind.

But the appeals to low and degrading motives are equally strong. Here are presented the easiest methods of acquiring wealth that the world has ever known. The appeal to selfish greed has never before been so strong as it is in the United States to-day. Every boy here knows that a vendor of mouse traps may, by sagacity, by unscrupulous energy, and by a selfish disregard of the claims and needs of others, become a multi-millionaire; and the tendency is to arouse within the boy a spirit of selfishness to an extent that shall destroy all symmetry of character. Then think of the uses to which the acquired possessions may be put. There is nothing low or groveling in the human soul that may not thus be gratified. And perhaps one of the very worst results of our easily acquired wealth is that it leads men and women into frivolities. Life becomes to them a mere superficiality. All noble earnestness goes out of it. The whole becomes a shallow pretense.

In view of these conditions what can reasonably be expected of the free-school system? Shall it be required to stimulate the higher tendencies to which we have referred, and to regulate or suppress the lower? Shall the intelligence developed in the free schools and the moral influences wielded in them tend to make better citizens of their pupils than those pupils would have otherwise become? It is reasonable to expect that they will strengthen the habits of industry, intensify the spirit of genuine patriotism, teach in a practical way the truth that the way of the transgressor is hard? Will the young men and women who have been taught in these schools have a clearer notion of that which is essential to the prosperity of a community? Will they be able to discern the difference between true liberty and the unbridled license which sometimes assumes the name? Will they clearly perceive the fact that the mere possession of money is not necessarily a source of

happiness? In other words, will they come forth out of these schools better equipped for the real work of life than they would have been if no free schools had existed?

Some writers seem disposed to answer these questions in the negative. Many facts are adduced to sustain this want of faith in the able schools. We are reminded by the critics that in recent years there has been a great increase in crime in our country. It seems from the year 1850 to 1890 there was an increase of 445 per cent in criminals, while the population had increased only 170 per cent. It seems also that quite recently 1189 superintendents and teachers in the United States made reports upon the condition of the public schools which were not on the whole complimentary. It seems that much of the teaching is of an imperfect character. Many of the teachers are untrained and unskilled. Even the management of the schools is in many cases declared to be corrupt. Teachers are not selected, we are told, on account of their fitness for the work, but receive their appointments through the influence of politicians, ecclesiastics and publishing houses.

Now considering the mixed character of our population, and the demoralizing conditions already referred to, are these latter statements a matter of surprise? What else could have been expected? Miracles cannot, or, at least, should not, be expected from the free schools. They must deal with human nature as they find it. They have not the power to dictate to their own management. The nature of our institutions requires that the schools shall be controlled by the citizens. The boards of education, the school committees, and the boards of directors are selected by the citizens from among themselves. The best grade of citizenship is not always represented upon these boards. Well qualified teachers, men and women of high aims and purposes, often find themselves constrained to adapt their methods to unreasonable demands. If humanity were perfect our schools would doubtless be without fault, but the humanity with which we have to deal is certainly far from perfection.

Let us notice here the fact that, to every mind affected by it, education is a liberating process. It sets the man free. It gives him a consciousness of unexpected power. He finds himself able to do certain things which heretofore he could not have done. It ought also to teach him the ethical truths that lie at the basis of a correct life. The symmetrically cultured man ought clearly to discern the value of right living. His knowledge should give to him a feeling of moral responsibility. And we believe that right mental training does have this effect.

But it often happens that the sense of freedom imparted by culture

developes more rapidly than this feeling of moral responsibility. In other words the ignorant man in being educated acquires power more rapidly than he acquires a reasonable self control.

The question is sometimes raised whether it would not be wise to withhold education from persons whose moral status is low. It has been urged that intellectual training only enables such persons to do more evil, and to do it more effectually, than if they had remained untaught. To educate such persons, we are sometimes told, is simply to multiply their power for evil. Even Horace Mann at one time expressed a doubt whether it were wise to "sharpen the claws of the tiger." This question we feel constrained to answer in the negative. We have no right to withhold culture from any human being because we fear he may not use it for good ends. The responsibility for his moral conduct is with him and not with us. There are other ways of dealing with the morally defective class. We have no right to dwarf them intellectually, because they seem already to be dwarfed morally. And this conclusion will appear all the more just when we remember that the culture of the schools, rightly imparted, tends to purify the life. The effect of the culture bestowed upon these defective persons ought to be, and we believe is, to strengthen the moral purpose within them, and to make them less likely to offend against the moral code.

Recurring to the question as to what can reasonably be expected of the free-school system, we are now prepared to say that the schools shall be required to stimulate the higher tendencies and to regulate and suppress the lower. We affirm that the intelligence developed in the free schools, and the moral influence wielded in them, tend to make better citizens of the pupils than those pupils would otherwise have become. We have a right to expect that the work done in the schools shall strengthen the habit of industry, intensify the spirit of genuine patriotism, and that the young men and women who have been taught in these schools will have a clearer notion of that which is essential to the prosperity of a community than they would otherwise have had. We expect them to be able to discern the difference, in some degree at least, between true liberty and the unbridled license which sometimes usurps the name. We expect them to have some apprehension of the fact that the mere possession of money is not necessarily a source of happiness. In other words, we expect these children to come forth out of these schools better equipped for the real work of life than they would have been if no free schools had existed.

What warrant have we for these expectations? Let us notice first the conditions to which the child is subjected in a good school. There is order. Certain duties are performed at certain times. Every

pupil conforms to this order more or less. The result is that he becomes accustomed to it. That is, he becomes accustomed to obey reasonable regulations. He becomes accustomed to lay aside at any given moment his personal preferences as to conduct, and to do that which this reasonable rule requires. Look at a group of children on the playground of a schoolhouse. They are playing with all the earnestness and hilarious joy of child nature. One would think to see them that they were intoxicated with their sense of freedom. Ringing shouts and joyous laughter fill the air. But the tap of a bell is heard, and instantly the game is dropped. The loud laughter ceases, and the duties of the day, humdrum possibly, are vigorously entered upon. And the best of it all is, that although, as stated, the boisterous hilarity is brought to an end, still the cheerfulness continues. The work is performed, not from compulsion, but voluntarily. If the order of life is volition, action, habit, character, destiny, is not that order complied with here in a high and ennobling sense?

And what is the nature of the work entered upon? With what do the children deal in their school exercises? May we not say that in learning their lessons they come in contact with as large a proportion of honest truth as we encounter anywhere? I know that we are told that there are fibs in the school histories, that the books on geography give false impressions sometimes, that the philosophical treatises are not always reliable. But this does not destroy the inspiring fact that the great aim of school work is to get at the absolute truth. In studying, the pupil is not striving to find what will help a party, or a sect, or a clique, but he is trying to find out what is true. One of the principal studies in our schools is the English language; more or less of literature of this language is always read. And it is one of the inspiring facts of our civilization that the English language is so comparatively clean, and so true to the highest moral ideas. It is certainly free from much of the immoral filth that permeates some other languages.

Are there not many ennobling qualities of mind developed by the school and its processes? Is not the habit of industry one of these? Lazy boys compelled to work with their hands, sometimes think it would be an escape from drudgery to be put to studying, but, so far as my observation goes, bodily toil is not so exacting in its demands as continuous, grinding, mental application. It would seem that most of the thoroughly lazy would be glad to escape from downright hard study even to the old-fashioned cornfield. Mental industry demands an effort of will far beyond what muscular activity requires. To be a successful student the pupil must concentrate his faculties with a powerful and continuous energy. And the habit of such continuous

application is acquired in a well-conducted school more effectually than elsewhere.

And of course, all that industry is able to do in fortifying the mind against evil by a preoccupation of its faculties is more effectually done by study than any other means. The studious man has less time for wrong-doing than the idler. And this result is greatly strengthened by the fact that in study the whole man must be employed. The mechanic at his bench or the farmer in the field may let his thoughts wander over distant scenes,—may, if he will, allow his imagination to run riot among the foul imagery of sin. But the young man who is delving into the mysteries of the integral calculus must absolutely shut out of his mind every such thing. If he indulges in such vagaries at all it must be in the intervals of study. And then the temptation must be strong enough to overcome the bent which thorough study has given to the thoughts.

There are many ways in which, it seems to me, good school work tends to form and fix good habits, and to develop a sound and healthy moral character. But there is not time even to mention them. I will simply add that in school work the child comes in contact either with the phenomena and laws of the natural world, as in the study of science, or with the utterances of the wisest and noblest of human kind, as in the study of literature. What must be the effect of either of these upon the mind of the student? It cannot be otherwise than beneficial. In either case the glory of righteous law is manifested, and in the second case there is added the inspiration that comes from the personality of great and pure minds.

But I may be reminded that these are *a priori* considerations, and that the real question is as to the observed facts, the actual outcome of the work of the schools. And surely there is no lack here. Cheering facts may be adduced. We have referred to the matter of bad citizenship,—the prevalence of crime in the United States. There are many persons among us who do not feel sufficiently the responsibility that rests upon them to do what they can in order to promote good order in the communities in which they live. They do not seem to consider the effect of their selfish deeds upon their fellowmen, and upon their own ultimate happiness. They are the slaves of their own low impulses, and their slavery involves disaster to themselves and others. But these conditions exist in spite of the school training, and not on account of it. In 1870, according to Dr. Harris, the returns of seventeen states showed eight times as many criminals from the illiterate stratum of the population as from an equal number who could read and write. Many other investigations showed similar results. Many years ago Horace Mann sent letters of inquiry to a great number

of manufacturers in the United States, inquiring as to the relative efficiency and good behavior of workmen who could sign their names to receipts for money as compared with those who could not. The answers were an overwhelming vindication of culture as a promoter of skill in labor and of self-restraint in conduct. In dealing with our school system we do not encounter such an illogical condition as that intellectual culture, accompanied by habits of reasonable self-restraint, fails to strengthen every good element of the human character.

I believe that on the whole our schools make for righteousness as well as for intelligence. And the fact that they are not able to remove all evils does not imply that the schools are inefficient, but only indicates that the evils to be removed are of gigantic magnitude and endowed with a terrible persistency.

Undoubtedly the failure of the public schools to meet the highest expectations is largely due to the lack of thoroughness in much of the work. This deficiency takes on two forms. The facts and principles acquired by the learner are loosely and feebly grasped; and in too many instances superficial facts and principles are dealt with. This condition arises in part from the lack of philosophical preparation on the part of the teachers, and in part from the want of appreciation of good work on the part of parents and school officers. Too many pupils are placed under the care of one teacher. Trifling matters are allowed to interfere with the attendance of children upon the schools.

Indeed, in some cases the school seems to be regarded only as a sort of convenient receptacle for children who would otherwise be burdensome to parents and guardians. But while this concession is made to the critics, it may justly be affirmed that there is in this country a vast amount of earnest, faithful, and intelligent teaching. It is pleasant to reflect that there is an army of men and women teaching in our schools who have given thorough, long-continued and faithful study to their profession. And the number of these well-equipped instructors is rapidly increasing. Our normal schools are possibly not immaculate, but they are, on the whole, doing a noble and effective work. By very many of the teachers the conditions, the mental and moral needs of children, are thoughtfully considered and the instrumentalities of the school room are adjusted to these wants.

In making this plea for the public schools we do not wish to be understood as objecting to all criticism. On the contrary the man who points out existing defects in our system and methods of education, and does it from the right motive, is rendering an invaluable service. It were foolish to claim that in our educational work we have attained perfection. There is no fact more helpful and stimulating to the teacher than the fact that there are better methods to be

mastered by him and a higher success to be achieved than anything he has yet attained. Let the critical work then be continued. Let the fallacies in our pedagogical logic and the defects in our pedagogical methods be pointed out, but let it be done in a kindly spirit. Let the possibility of improvement be continually held forth. Let it be the criticism of hope and not of despair.

But there is another thought which should not be omitted in this discussion. The public school system is only a system. Like democracy, it is an instrument which, rightly used, is capable of accomplishing untold good. In the school work knowledge is acquired by the pupil, and knowledge of itself wields a beneficent influence over the mind that possesses it. But, conceding all this, we must still say that in the training of children the mightiest and best influence is wielded by the personality of the teacher. This is the motive force in the educational process. It is the moving energy in the grand educational machinery. The love of knowledge is a powerful stimulus. But with children the personality of the teacher is, in some sense at least, a nobler and more effective power. This personal influence operates as a mighty stimulus to the mastery of knowledge. But its grandest effect is exhibited in the molding of character,—in the developing of right habits,—in accustoming the child to be ruled by worthy ideals of life and conduct.

And it is an inspiring thought that with all their defects the great mass of our teachers, men and women, are so well fitted to wield this power. Compare the teachers of the land with the great mass of the citizens, in respect to intelligence, in respect to moral character. The comparison will surely result favorably to the instructors of our youth. This is a condition of things demanded by the public sentiment of the land. Society requires on the part of the teacher a reasonable conformity to the moral code, and at least some regard for the refining influences that accompany culture. It is a proof of the dignity of our profession that the public makes these higher demands upon us, that there is a depth of depravity and coarseness to which the teacher is not permitted to descend on pain of being dismissed from the ranks.

The free public school has met all reasonable expectations. It is the greatest innovation upon pre-existing policies promulgated since the Christian era. Time has ratified its soundness. More than two centuries now proclaim it to be as wise as it is courageous, as beneficial as it is disinterested. It has given us increased power in the production of wealth. It has diminished pauperism by opening new avenues of labor and by showing how money can be saved as well as earned. It has made more of social life, and there is less crime to be supported or punished. It has opened nobler fields of ambition than

fields of war. It has fostered human brotherhood. It has furnished a skilled force at hand for constant wants and emergencies—a force that has built our railroads, and opened our mines, established our workshops, built our ships, and made the waste places “blossom as the rose.” It has made our people contented and happy to remain in the places of their birth, wearing out their lives in useful industries, realizing that nowhere else could be found better or wiser instruction for their children, and that that instruction would nowhere be more generously appreciated. It has made the children of the Saxon, the Norman, the Celt, and the Teuton—Americans. It will make the decision at the ballot-box next November a decision which shall be in accord with national honor and true economic principles. It does fulfill all reasonable expectations.

Let us show our thorough belief in it by striving to perpetuate and improve it.

DEMOCRACY AND EDUCATION.

BY DR. NICHOLAS MURRAY BUTLER, COLUMBIA UNIVERSITY, NEW YORK CITY.

Philosophers, poets, and sometimes men of science, are fond of speculating on an answer to the question, whither are we tending. But more personal matters and more immediate interests detain the attention of the vast majority of mankind. The mere question of absolute physical direction, to say nothing of the tendencies of institutions and ideals, lies far beyond the range of vision of the average man. The passenger in a railway train moving west may walk leisurely eastward, within the limits of the train, and feel certain of his direction and speed. But the train traveling westward, forty miles an hour, is on the surface of a planet that revolves on its axis from west to east with a velocity of a thousand miles an hour. More than this, the earth is also plunging forward in space, in its orbit about the sun, at the fearful rate of more than 1100 miles per minute; while as a member of the solar system it drifts rapidly with its fellows toward a distant point in the constellation Hercules. Perhaps the whole sidereal system, the entire *cosmos* even, have yet other motions of their own. How hopeless, then, is it to attempt to trace the exact path, judged by an absolute standard, of a body moving on the earth's surface. The very conception staggers us and our imaginations fall back helpless.

Nor is it far otherwise with the directions and tendencies of things intellectual and institutional. The *laudator temporis acti* is con-

vinced that civilization is just now on a downward grade. The old order has changed and given place to a new, and the new order seems to him to lack something of the robustness, the idealism, the valor, of the old. His antagonist, fresh from contemplating the abstract rights of man as depicted by modern political philosophers, sees hope and promise only in the future. To such an observer the past is a record of folly, imperfection, and crime. The sane man may be forgiven if at times he fails to listen with patience to either advocate. His sanity deserts him, however, if he attempts to take refuge in cynicism and pessimism. While we may not hope to grasp fully the significance of movements of which we ourselves are a part, we can nevertheless study them, trace their beginnings, and measure their present effects. Such an attitude, hopeful yet cautious, leads to what is at once the scientific and the philosophical point of view.

However difficult it may be to estimate present tendencies with any precision or authority, there is a widespread instinctive feeling among thoughtful men, as Mr. Kidd has pointed out in the first pages of his "Social Evolution," that a definite stage in the evolution of our civilization is drawing to a close and that we are face to face with a new era. The history of the nineteenth century lends color to the suggestion that the new era has already begun. The evidence for this is drawn from the records of material advance, of scientific progress, and of political development.

The material advances made since the present century opened are more numerous and more striking than the sum total of those that all previous history records. We find it difficult even to imagine the world of our grandfathers, and almost impossible to appreciate or understand it. Without the factory, without the manifold products and applications of steam and electricity, without even the daily newspapers and the sulphur match, the details of our daily life would be strangely different. In our time a wholly new series of mechanical and economic forces is actively at work, and has already changed the appearance of the earth's surface. What another hundred years may bring forth no one dares predict.

The scientific progress of the century is no less marvelous and no less revolutionary in its effects than the material advance. The nebular hypothesis, once the speculative dream of a few mathematicians and philosophers, is now a scientific commonplace. The geology of Lyell, the astronomy of Herschel, the biology of von Baer, Darwin, and Huxley, the physiology of Müller, the physics of Helmholtz and Roentgen, are already a part of the common knowledge of all educated men. To us the world and its constitution appear very differently than to our ancestors.

But most striking and impressive of all movements of the century is the political development toward the form of government known as democracy. Steadily and doggedly throughout the ten decades the movement toward democracy has gone its conquering way. When the century opened democracy was a chimera. It had been attempted in Greece and Rome and again in the Middle Ages, and the reflecting portion of mankind believed it to be a failure. Whatever its possibilities in a small and homogeneous community, it was felt to be wholly inapplicable to large states. The contention that government could be carried on by what Mr. Mill called collective mediocrity, rather than by the intelligent few, was regarded as preposterous. The horrible spectre of the French Revolution was fresh in the minds of men. The United States, hardly risen from their cradle, were regarded by the statesmen of Europe with a curiosity, partly amused, partly disdainful. Germany was governed by an absolute monarch, the grand nephew of the great Frederick himself. In England a constitutional oligarchy, with Pitt at its head, was firmly intrenched in power. The Napoleonic reaction was in full swing in France. How different will be the spectacle when the twentieth century opens! In Great Britain one far-reaching reform after another has left standing the shell of oligarchy only. The spirit and support of British civilization are democratic. Despite the influence of Bismarck and the two Williams' great progress is making toward the democratization of Germany. France, after a period of unexampled trouble and unrest, has founded a successful and apparently stable republic. The United States have disappointed every foe and falsified the predictions of every hostile critic. The governmental framework constructed by the fathers for less than four millions of people, scattered along a narrow strip of seaboard, has expanded easily to meet the needs of a diverse population twenty times as large, gathered into great cities and distributed over an empire of seacoast, mountain, plain, and forest. It has withstood the shock of the greatest civil war of all time, fought by men of the highest intelligence and most determined convictions. It has permitted the development and expansion of a civilization in which there is equality of opportunity for all and where the highest civil and military honors have been thrust upon the children of the plain people by their grateful fellow-citizens.

So striking has this phenomenon of democracy become, so widespread is its influence, and so dominating are its ideals that we have rightly begun to study it, both with the impartial eye of the historian and with the analytic method of the scientist. The literature of democracy for the past half-century is extremely important. De Tocqueville, Bagehot, Scherer, Carlyle, Sir Henry Maine, Bryce, and Lecky

are but a few of the great names that have contributed to it. Through all the pages of these writers runs an expression of the conviction that the stream of tendency toward democracy can neither be turned back nor permanently checked. Some of these students of democracy are its enthusiastic advocates, others are its hostile critics: all alike seem to resign themselves to it.

The process of substituting this new social and political system for an older one has not been uninterrupted or untroubled, nor has it given perfect satisfaction. As the political pendulum has continued to swing through a wide but diminishing arc, the cries have been loud and constant that injustice and favoritism have not been suppressed, that all are not equally prosperous, and that not even democracy is a cure for all our distress and dissatisfaction. Much of this is no doubt due to the tendency in all stages of history, spoken of by Burke, to ascribe to prevailing forms of government ills that in reality flow from the constitution of human nature. But in part at least—in how great part perhaps we fail to recognize—it is due to our imperfect and halting application of our democratic ideals and our democratic responsibilities. The platitudes of democracy are readily accepted by the crowd; the full depth of its principles is far from being generally understood. It is easy to cry “Liberty, Equality, and Fraternity,” and to carve the words in letters of stone upon public buildings and public monuments. It is not so easy to answer the query whether in truth unrestricted liberty and perfect equality are at all compatible. For it has been pointed out that liberty leads directly to inequality, based upon the natural differences of capacity and application among men. Equality, on the other hand, in any economic sense, is attainable only by the suppression in some degree of liberty, in order that, directly or indirectly, the strong arm of the state may be able to hold back the precocious and to push forward the sluggish. Obviously there is food for thought in this; thought that may serve to check the rhetorical exuberance of the enthusiast, and lead him to ask whether we yet fully grasp what democracy means.

Democracy is, as I have said, so novel a movement and so sweeping a one, that we have not yet had time to compare it closely, in all its phases, with monarchy and oligarchy. The advantages of these forms of political organization were manifest when society was young and man's institutional life yet undeveloped. As time went on the weaknesses of such forms of government became apparent. The plunge into democracy was made, and we have usually gone no further than to contrast its blessings with what we know of the oppression and inequity that resulted from the kingship and the oligarchy in the early modern period. We must, however, go further than this, and gain

truer and deeper insights into the institutional life of which we are a part.

It is just here that we find evidence of the close relations that exist between democracy and education. So long as the direction of man's institutional life was in the hands of one, or the few, the need for a wide diffusion of political intelligence was not strongly felt. The divine right of kings found its correlative in the diabolical ignorance of the masses. There was no educational ideal, resting upon a social and political necessity, that was broad enough to include the whole people. But the rapid widening of the basis of sovereignty has changed all that. No deeper conviction pervades the people of the United States and of France, who are the most aggressive exponents of democracy, than that the preservation of liberty under the law and of the institutions that are our precious possession and proud heritage, depends upon the intelligence of the whole people. It is on this unshakable foundation that the argument for public education at public expense really rests.

It was not by accident that the Greek philosophers made their contributions to educational theory in treatises on the nature and functions of the State. Both Plato and Aristotle had a deep insight into the meaning of man's social and institutional life. To live together with one's fellows in a community involves fitness so to live. This fitness, in turn, implies discipline, instruction, training; that is, education. The highest type of individual life is found in community life. Ethics passes into or includes politics; and the education of the individual is education for the state. The educated Greek at the height of his country's development was taught to regard participation in the public service as a duty and a privilege alike. The well-being of the community was constantly before him as an ideal of personal conduct. To depart from that point of view is to entail the gravest consequences. That a large proportion of our people, and among their number some of the most highly trained, have departed from it needs no proof.

Failure to understand the political life of a democratic state and failure to participate fully in it lead directly to false views of the state and its relations to the individual citizen. Instead of being regarded as the sum total of the citizens who compose it, the state is then, in thought at least, regarded as an artificial creation, the plaything of so-called politicians and wire-pullers. This view that the individual and the state are somehow independent of each other is not without support in modern political philosophy, but it is a crude and superficial view. It underlies those fallacies that regard the state either as a tyrant to be resisted or as a benefactor to be courted. No democracy can endure permanently on either basis.

The state is the completion of the life of the individual, and without it he would not wholly live. To inculcate this doctrine should be an aim of all education in a democracy. To live up to it should be the ideal of the nation's educated men.

Impossible in theory as the separation of the state from the individuals who compose it seems, yet in practice it is found to exist. This is true in the United States, and in some localities more than others. Our constitutional system, elaborately adjusted so that each individual's choice may count in the ascertainment of the common will, now shelters a system of party organization and of political practice undreamt of by the fathers, which effectually reduces our theoretical democracy to an oligarchy, and that oligarchy by no means an aristocracy. With here and there an exception, the educated men of the country hold themselves aloof—or are held aloof—from participation in what is called practical politics. That field of activity which should attract the highest intelligence of the nation too often repels it. When a man of the most highly trained powers engages in political life he becomes an object of curiosity and comment. If he despises the petty arts and chicaneries of the demagogue he becomes "unpopular." After a brief interval he passes off the public stage without even a perfunctory recognition of his services. It is safe to say that the framers of no government, least of all the framers of our own, contemplated a practical outcome such as this. If education and training unfit men for political life, then there is something wrong either with our political life or with our education.

The teachers of the country should address themselves to this question with determination and zeal.

The teaching of civil government is good. The inculcation of patriotism is good. The flag upon the schoolhouse is good. But all these lie upon the surface. The real question involved is an ethical one. It reaches deep down to the very foundations of morality. It is illuminated by history.

The public education, then, of a great democratic people, has other aims to fulfill than the extension of scientific knowledge or the development of literary culture. It must prepare for intelligent citizenship. More than a century ago Burke wrote that "the generality of people are fifty years, at least, behindhand in their politics. There are but very few who are capable of comparing and digesting what passes before their eyes at different times and occasions, so as to form the whole into a distinct system." This is the warning of one of the greatest of publicists that a thoroughly instructed and competent public opinion on political matters is difficult to attain. Yet, unless we are to surrender the very principles on which democracy

rests, we must struggle to attain it. Something may be accomplished by precept, something by direct instruction, much by example. The words "politics" and "politician" must be rescued from the low esteem into which they have fallen, and restored to their ancient and honorable meaning. It is safe to say that the framers of our Constitution never foresaw that the time would come when thousands of intelligent men and women would regard "politics" as beneath them, and when a widespread unwillingness to participate in the choice of persons and policies would develop among the people. Yet such is, of course, the case. The people of the state of New York will in November next choose a governor. The power and dignity of the office are among the greatest in the land. About one and a half million qualified voters will be entitled to participate in the choice. Theoretically any competent person might be put forward for the office, and every individual's preference would be recorded and weighed. As a matter of fact, however, the choice of the state must be made between two persons, who in turn will be selected by, perhaps, ten per cent of the electorate, at the suggestion or dictation of not more than a dozen men. Had such a system, or anything like it, been proposed at the time the constitution was adopted, there would have been instant rebellion. "Life, liberty and the pursuit of happiness," would not have seemed worth having under such conditions. Yet, now that it has come about, there is no very great dissatisfaction with it. The system could be broken up in a twelvemonth if men really cared to break it up. It exists, therefore, by popular consent, if not with popular approval. Its objective results may be as good as those that would be reached by the ideal system, but its effect on the individual is disastrous. It induces a feeling of irresponsibility for public policy and a lack of interest in it that is absolutely destructive of good citizenship. The good citizen is not the querulous critic of public men and public affairs, however intelligent he may be; he is rather the constant participator in political struggles who has well-grounded convictions and a strong determination to influence, by all honorable means, the opinion of the community. Were it otherwise, universal suffrage would not be worth having, and public education would be a luxury, not a necessity. Nor do we better ourselves any or serve the public interest by berating those who do interest themselves continually in politics, when their aims and their methods are not to our liking. There can be no doubt that the patriotic and well-intentioned element in the community is stronger and more numerous than the self-seeking and evil-dispositioned. It has the remedy in its own hands, and it is one of the chief duties of our education to enforce this truth.

Much of the disinclination to engage in active political life that is noticeable among a large portion of our people is due, I believe, to the evil effects upon political standards and methods that flow from the debasing and degrading system of treating public office as a reward for partisan activity, that has gained so strong a hold in the United States. The spoils system is utterly undemocratic and utterly unworthy of toleration by an intelligent people. Suppose that it ruled the schools, as it rules so many other departments of public administration: then we should expect to see the election of a mayor in Boston, Chicago, New Orleans, or San Francisco followed by hundreds of changes among the public school teachers, made solely for political reasons. How long do you suppose that this association would permit that to go on without a protest that would be heard from Maine to Texas? Why should we, as good citizens, be more tolerant of such an abuse in other departments of the government? We have all noted with gratification the progress that is making toward the elimination of this evil. A determined band of men have kept the issue before the public for nearly a generation, and now they have the satisfaction of seeing a great portion of the national service wrested from the defiling hand of the spoils hunter. In the state of New York the people have put into their new constitution an emphatic declaration on the subject. The full effect of this declaration, splendidly upheld and broadly interpreted by the courts, is just beginning to dawn upon the foes of a reformed and efficient public service. From this advance of sound sentiment and honest policy we may take every encouragement. But much remains to be done. Public sentiment must be first interested, then educated. Efficient public service is a mark of civilization. To turn over the care of great public undertakings to the self-seeking camp-followers of some political potentate is barbaric. We teachers are the first to insist that incompetent and untrained persons shall not be allowed in the service of the schools. Why, then, should we tolerate the sight of a house-painter instead of an engineer supervising the streets and roadways of a city of a hundred thousand inhabitants, or that of an illiterate hanger-on presiding over the public works of a great metropolis? These instances, drawn at random from recent political history, are typical of conditions that will be found widely diffused throughout our public service. These conditions exist because of bad citizenship, low ideals of public service, and wretchedly inadequate moral vision. They will not be remedied until each one of us assumes his share of the task.

It is instructive, too, to note that the spoils system has diverted public interest in a great measure from choice between policies to a choice between men. Two hundred years ago men would have made

great sacrifices for an opportunity to share in the making of the laws by which they were governed. Yet when in 1894, the people of this state were called upon to vote at one and the same election, for a governor, and for or against a new constitution containing many important and some novel propositions, more than a million and a quarter men voted for a candidate for governor, while less than three-quarters of a million expressed themselves regarding the proposed constitution. And this is by no means a solitary instance of the tendency that it illustrates. A rational and intelligent democracy will first discuss questions of principle and then select agents in accordance with their earlier determination. To fix our interest solely on individuals and to overlook or neglect the principles for which they stand is not intelligent.

It is a serious error, too, to believe, and to spread the belief, that democracies have nothing to learn as to principles of government and nothing to improve. From the time of Aristotle the dangers that are inherent in democracy have been known and discussed. But in our time men are often too blinded by the brilliancy of the manifest successes and advantages of this form of government to be able or willing to consider carefully the other side of the picture. How long, for example, could the American Congress maintain its power and prestige, if its membership was split up into half a score of warring groups, as in France? How long will the American senate continue to call forth the respect and confidence of the people, if its childish methods of transacting public business and its inability to close its own debates are allowed to continue? How long would life in our greatest metropolis be endurable, if its administration be turned over permanently to the ignorant and rapacious members of a society organized for political plunder? What more distressing division of our people can there be than one on sectional lines, such as took place in 1860, and such as may be witnessed again in 1896? Is it possible to believe that our native optimism is all that is needed to extricate us from these dangers—dangers not imaginary, but terribly real?

The difficulties of democracy are the opportunities of education. If our education be sound, if it lay due emphasis on individual responsibility for social and political progress, if it counteract the anarchistic tendencies that grow out of selfishness and greed, if it promote a patriotism that reaches further than militant jingoism and gunboats, then we may cease to have any doubts as to the perpetuity and integrity of our institutions. But I am profoundly convinced that the greatest educational need of our time, in higher and lower schools alike, is a fuller appreciation on the part of the teachers of what human institutions really mean and what tremendous moral

issues and principles they involve. The ethics of individual life must be traced to its roots in the ethics of the social whole. The family, property, the common law, the state and the church, are all involved. These, and their products, taken together, constitute civilization and mark it off from barbarism. Inheritor of a glorious past, each generation is a trustee for posterity. To preserve, protect, and transmit its inheritance unimpaired is its highest duty. To accomplish this is not the task of the few, but the duty of all.

That democracy alone will be triumphant which has both intelligence and character. To develop both among the whole people is the task of education in a democracy. Not then, by vain-glorious boasting, not by self-satisfied indifference, not by selfish and indolent withdrawal from participation in the interests and government of the community; but rather by that enthusiasm born of intense conviction, that finds the happiness of each in the good of all, will our educational ideals be satisfied and our free government be placed where the forces of dissolution and decay cannot reach it.

AMERICAN LITERATURE.

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The history of mankind is little more than the list of the civilizations that have arisen one on the ruin of the other, the Roman supplanting the Greek, as the Assyrian had been ousted by the Babylonian. The life of each of these successive civilizations was proportioned to the vitality of the ideas by which it was animated; and we cannot estimate it or even understand it except in so far as we are able to grasp these unlying principles. What the ideas were which dominated these vanished civilizations it is for us to discover for ourselves as best we may by a study of all the records they left behind them, and especially by a reverent examination of their laws, their arts, and their writings in so far as these have been preserved to us. Of all these relics of people now dead and gone, none is so instructive as literature, and none is so interesting; by its aid we are enabled to reconstruct the past, as we are also helped to understand the present.

Of the literatures which thus explain to us our fellow man as he was and as he is, three seem to me pre-eminent, standing out and above the others not only by reason of the greater number of men of genius who have illustrated them, but also by reason of their own more

persistent strength and their own broader variety. These three literatures are the Greek, the French, and the English.

There are great names in the other modern languages, no doubt,—the names of Dante and of Cervantes and of Goethe, than which, indeed, there are none greater. In French literature, however, and in the English there are not wanting names as mighty as these. Fortunately, the possession of genius is not the privilege of any one language, of any one country, or of any one century. Where French literature and English can claim superiority over Italian, Spanish, and German is rather in sustaining a higher average of excellence for a longer period of time. The literature of the Italian language, of the Spanish, and of the German has no such bead-roll of writers of the first rank as illustrates the literature of the French and of the English.

There is perhaps no more manly instrument of precision than the Latin language, none which better repays the struggle for its mastery; but Latin literature if not second-rate, when tried by the loftiest standards, is at least secondary, being transplanted from Greece and lacking resolute roots in its own soil. Nor is any dispute possible as to the high value of Hebrew literature; as Coleridge declared with characteristic insight, "Sublimity is Hebrew by birth;" but Hebrew literature has not the wide range of the Greek, nor its impeccable beauty.

"Art is only form," said Georges Sand; and Goethe declared that the "highest operation of art is form-giving." If we accept these sayings there is no need to dwell on the supreme distinction of Greek literature, for it is only in Greek that we find the undying perfection of form. It is there only that we have clear and deep thought always beautifully embodied. Indeed, truth and beauty govern Greek literature so absolutely that, old as it is, it seems to us ever fresh and eternally young. After two thousand years and more it strikes us to-day as startlingly modern. Thoreau,—whose own phrase was often Attic in its delicate precision,—Thoreau asked, "What are the classics but the noblest recorded thoughts of man? They are the only oracles that are not decayed."

Nevertheless, the world has kept restlessly moving since the fall of Athens, and mankind has developed needs that the Greeks knew not. As Molière puts it pithily, "The ancients are the ancients, and we are the men of to-day." There are questions in America now, and not a few of them, undreamed of in Sparta; and for the answers to these it is vain to go to Greek literature, modern as it may be in so many ways.

French literature has not a little of the moderation and of the charm of Greek literature. It is not violent; it is not boisterous even;

it is never freakish. It has balance and order and a broad sanity. It has an unfailing sense of style. It has lightness of touch, and it has also and always intellectual seriousness. The literature is like the language; and Voltaire declared that what was not clear was not French. And the language itself is the fit instrument of the people who use it and who have refined it for their needs—a people logical beyond all others, gifted in mathematics, devoid of hypocrisy, law-abiding, governed by the social instinct, inheritors of the Latin tradition and yet infused with the Celtic spirit.

To those of us who are controlled by the Anglo-Saxon ideals, whether or not we come of English stock, to those of us who adhere to Anglo-Saxon conventions, no other literature can serve as a better corrective of our inherited tendencies than the French. The chief characteristic of English literature is energy, power often ill-restrained, vigor often superabundant. From the earliest rude war-songs of the stalwart Saxon fighters who were beginning to make the English language, to the latest short story setting forth the strife of an American mining camp, there is never any lack of force in English literature. There is always the Teutonic boldness and rudeness,—the Teutonic readiness to push forward and to shoulder the rest of the world out of the way,—the Teutonic independence that leads every man to fight for his own hand, like the smith in Scott's story. What we do not discover in English literature, with all its overmastering vitality, is economy of effort, the French self-control, the Greek sense of form.

French literature and English literature have existed side by side for many centuries, each of them influencing the other now and again, and yet each of them preserving its own individuality, always and ever revealing the dominant characteristics of the people speaking its language. We need not attempt to weigh them one against the other, and to measure them with a foot rule, and to declare which is the greater. Equal they may be in the past and in the present; equal in the future they are not likely to be. The qualities which make French literature what it is tend also to keep the French race from expansion; just as the qualities which make English literature what it is have sent the English-speaking stock forth to fill up the waste places of the earth, and to wrest new lands from hostile savages or from inhospitable nature.

French was the language of the courts of Europe when English was little better than a dialect of rough islanders. When Chaucer chose his native English as the vehicle of his verse he showed both courage and prescience,—a courage and a prescience lacking in Bacon, who lived two hundred years later, and who did not feel himself insured against Time until his great work was safely entombed in

Latin. Even at the beginning of the nineteenth century there were more men and women in the world speaking French than there were speaking English. But now at the end of the nineteenth century, with the steady spread of our stock into the four quarters of the world, there are more than twice as many people using English as there are using French.

And the end is not yet, for while four-fifths of those who have French for their mother-tongue abide in France or along its borders, not a third of those who have English for their mother-tongue dwell in England. Not only in England, Ireland and Scotland, is English spoken, and in all the many British colonies which encompass the globe about; it is also the native speech of the people of the United States. English is the language of the stock which bids fair to prove itself the most masterful, hardy, and prolific, and which seems to possess a marvelous faculty for assimilating members of other allied stems and of getting these newly received elements to accept its own hereditary ideals.

English literature is likely therefore, to become in the future relatively more important and absolutely more influential. As there has been no relaxing of energy among the peoples that now speak the English language, probably there will be no alteration of the chief characteristic of English literature, although in time the changes of environment must make more or less modification inevitable. It will be curious to see in a century how the ideals and the practices of the race will alter, after the race is no longer pent up in an island, after it has scattered itself over the world and assimilated other elements and adjusted itself to other social organizations. Here in America we can see already some of these results, for already is the American differentiated from the Englishman. We may not be able to declare clearly wherein the difference consists; but we all recognize it plainly enough.

Colonel Higginson has suggested that the American has an added drop more of nervous fluid than the Englishman. It is perhaps apparent already that the American is swifter than the Englishman, slighter in build, springier in gait. Social changes are as evident as physical. Lowell remarked that if it was a good thing for an English duke that he had no social superior, it surely was not a bad thing for a Yankee farmer. Socially the American is less girt in by caste than the Englishman. These differences, obvious in life, are visible also in literature. We feel now, even if we do not care to define, the unlikeness of the writing of the British authors to the writing of the American authors. Neither man nor nature is the same in Great Britain as it is in the United States; and of necessity, therefore, there cannot be

any identity between the points of view of the men of letters of the two countries.

In time, as there come to be more writers in Canada, we shall have a perspective from yet another point of view; and in due season others will be presented to us from Australia and from India. No doubt these future authors will cherish the tradition of English literature as loyally as we Americans cherish it here in the United States, as loyally as the British cherish it in the little group of islands which was once the home of the ancestors of us all. Race characteristics are inexorable, and it is very unlikely that there will ever be any irreconcilable divergence between these separate divisions of the English-speaking peoples. English literature will continue to flourish as sturdily as ever after the parent stem has parted into five branches. All of these branches will take the same pride in their descent from a common stock and in their possession of a common literature and of a common language. A common language, I say, for the English language belongs to all those who use it, whether they live in London or in Chicago or in Melbourne.

It is not a little strange that it should now ever be needful to say that the British have no more ownership of the English language than we Americans have. The English language is the mother tongue of the inhabitants of the British isles, but so it is also the mother tongue of the inhabitants of the United States. It is not a loan to us, which may be recalled; it is not a gift, which we have accepted; it is a heritage, which we derived from our forefathers. We hold it by right of birth, and our title to it is just as good as the title of our kin across the sea. No younger brother's portion is it that we claim in the English language, but a whole and undivided half. It is an American possession as it is a British possession, no more and no less; and we hold it on the same terms that our cousins do. We have the rights of ownership, and the responsibilities also, exactly as they have and to exactly the same extent. The English language belongs to us also; it is ours to use as we please, just as the common law is ours, to modify according to our own needs; it is ours for us to keep pure and healthy; and it is ours for us to hand down to our children unimpaired in strength and in subtlety.

And as the language is a possession common to all the English-speaking peoples, so also is the literature. A share in the fame of Chaucer, and of Shakespeare, of Milton and of Dryden, is part of the inheritance of every one of us who has English for his mother tongue, whatever his fatherland. If there be anywhere a great poet or novelist or historian, it matters not where his birth or his residence or what his nationality, if he make use of the English language he is contribu-

ting to English literature. To distinguish the younger divisions of English literature from the older, we shall have to call that older division British; meaning thereby that portion of our common literature which is now produced by those who were left behind in the old home when the rest of the family went forth one by one to make their way in the world. Thus English literature, which was one and undivided till the end of the eighteenth century, has now in the nineteenth century two chief divisions—British and American; and it bids fair in the twentieth century to have three more—Canadian, Australian, and Indian.

Some such distinction between the several existing divisions of the English literature of our own time is needful, and it will be found useful. Absurd and very misleading is the antithesis sometimes made between American literature and English, since the American is but one of the divisions of the English literature of our time. Not long ago a pupil of one of the best private schools in New York maintained that American literature was just as important as English literature, producing in proof two companion manuals of the same size externally, although of course internally on a wholly different scale. Such a lack of proportion in the treatment of different parts of the literature of the English language is foolish and harmful. But a comparison of American literature with the merely British literature of today might be proper enough. What we need to grasp clearly is the fact that the stream of English literature had only one channel until the end of the last century, and that in this century it has two channels. The new mouth that this massive current has made for itself is American, and so we are compelled to call the old mouth British.

Through which of these channels the fuller stream shall flow in the next century no man can foretell today. It is a fact that the population of these United States is now nearly twice as large as the population of the British Isles, and not inferior in ability or in energy. But it is a fact also that in America a smaller proportion of the ability and the energy of the people seems to be devoted to the cause of letters. In a new country life itself offers the widest opportunities; and literature here has keener rivals and more of them than it can have in a land which has been cleared and tilled and tended since a time whereof the memory of man runneth not to the contrary. The earliest Americans had other duties than the writing of books; they had to lay deep the broad foundations of this mighty nation. It was more than two hundred years after the establishment of the first trading post on the island of Manhattan before Washington Irving published the "Sketch Book," the first work of American authorship to win a wide popularity beyond the borders of our own country—before Fenimore

Cooper a little later published "The Spy," the first work of American authorship to win a wide popularity beyond the borders of our own language. We may say that American literature is now but little older than the threescore years and ten allotted as the span of a man's natural life.

We had had authors, it is true, in the eighteenth century, and at least two of these, Jonathan Edwards and Benjamin Franklin, hold high rank; but it was not until towards the end of the first quarter of the nineteenth century that we began really to have a literature. It is scarcely an overstatement to say that there are men alive today who are as old as American literature is. But in the past three-quarters of a century American literature has taken root firmly, and blossomed forth abundantly, and spread itself abroad sturdily. Emerson followed Edwards and Franklin. Hawthorne and Poe followed Irving and Cooper. Bryant proved that nature here in America was fit for the purposes of art; and he was followed by Longfellow and Lowell, by Whittier and Holmes.

During these same three-score years and ten there were great writers in the other branch of the literature of our language, in British literature, perhaps greater writers than there were here in America, and of a certainty there were more of them. There is no need now to call the roll of the mighty men of letters alive in England in the middle of this century. But much as we admire these British authors, much as we respect them, I do not think that they are as close to us as the authors of our own country; we do not cherish them with the same affection. Just as the modern literatures are nearer to us than the ancient, because we ourselves are modern; just as English literature is nearer to us than French, because we ourselves speak English; so the American division of that literature is closer to us than the British. It helps us to understand one another, and it explains us to ourselves. If we accept the statement that, after all, literature is only a criticism of life, it is of value in proportion as its criticism of life is truthful. Surely it needs no argument to show that the life it is most needful for us Americans to have criticised truthfully is our own life. It is only in our own literature that we can hope to learn the truth about ourselves; and this indeed is what we must always insist upon in our literature, the truth, the whole truth, and nothing but the truth. Lowell reminded us that Goethe went to the root of the matter when he said that "people are always talking of the study of the ancients; yet what does this mean but apply yourself to the actual world and seek to express it, since this is what the ancients did when they were alive?"

As we consider the brief history of the American branch of English

literature, we can see that the growth of a healthy feeling in regard to it has been hindered by two unfortunate failings—provincialism and colonialism. By provincialism I mean the spirit of Little Pedlington, the spirit that makes swans of all our geese. By colonialism I mean the attitude of looking humbly towards the old country for guidance and for counsel even about our own affairs.

Provincialism is local pride unduly inflated. It is the temper that is ready to hail as a swan of Avon any local gosling who has taught himself to make an unnatural use of his own quills. It is always tempting to us to stand on tiptoe to proclaim our own superiority. It prevents our seeing ourselves in proper proportion to the rest of the world. It leads to the preparation of school manuals in which the three-score years and ten of American literature are made equal in importance to the thousand years of literature produced in Great Britain. It tends to render a modest writer like Longfellow, ridiculous by comparing him implicitly with the half dozen world-poets. In the final resort, no doubt, every people must be the judge of its own authors; but before that final judgment is rendered every people consults the precedents and measures its own local favorites by the cosmopolitan and eternal standards.

Colonialism is shown in the timid deference towards foreign opinion about our own deeds and in the unquestioning acceptance of the foreign estimate upon our own writers. It might be defined almost as a willingness to be second-hand, a feeling which finds satisfaction in calling Irving the American Goldsmith; Cooper, the American Scott; Bryant, the American Wordsworth; and Whittier, the American Burns. Fifty years ago, when this silly trick was far more prevalent than it is now, Lowell satirized it in the "Fable for Critics"

"Why, there's scarcely a huddle of log-huts and shanties
That has not brought forth its Miltons and Dantes;
I myself know ten Byrons, one Coleridge, three Shelleys,
Two Raphaels, six Titians (I think), one Apelles,
Leonardos and Rubenses plenty as lichens;
One (but that one is plenty) American Dickens,
A whole flocks of Lambs, any number of Tennysons,
In short, if a man has the luck to have any sons
He may feel pretty certain that one out of twain
Will be some very great person over again."

And elsewhere in the same poem Lowell protests against the literature that

"suits each whisper and motion
To what will be thought of it over the ocean."

The corrective of colonialism is a manly self-respect, a wholesome self-reliance, a wish to stand firmly on our own feet, a resolve to survey

life with our own eyes and not through any imported spectacles. The new world has already brought forth men of action—Washington, for example, and Lincoln—worthy of comparison with the best that the old world has enrolled on her records. Has the new world produced any man of letters of corresponding rank? Matthew Arnold thought that there were only five world-classics, Homer, Dante, Shakespeare, Milton, and Goethe. This seems a list unduly scantied; but it would need to be five times larger before it included a single American name. What of it? Even if the American poets are no one of them to be inscribed among the two-score chief singers of the world, they are not the less interesting to us Americans, not the less inspiring. When an English author suggested to Saint Beuve that he did not think Lamartine an important poet, the great French critic suavely answered, "He is important to us!" Without Lamartine there would be a blank in French literature. So we Americans may see clearly the defects of Bryant and of Whittier, and yet we may say that they are important to us, even though they, like Lamartine, are not among the foremost poets of their language or of their century.

Colonialism and provincialism, although they seem mutually destructive, still manage somehow to exist side by side in our criticism today. The best cure for them is a study of the two other great literatures, Greek and French. Too much attention to contemporary British literature is dangerous for us, since its chief characteristics are ours by inheritance. Matthew Arnold held that it was a work of supererogation of Carlyle to preach earnestness to the English who already abounded in that sense. For us to follow the lead of the British in literature or in any other art is but saying ditto to ourselves. It is like the marriage of cousins—and for the same reasons to be deplored. But the study of Greek literature supplies us instantly with the eternal standards the use of which cannot but be fatal to provincialism. And the study of French literature, which is as modern as our own and yet as different as may be in its ideals and its methods, is likely to serve as a certain antidote to colonialism.

The study of Greek literature, the greatest of the literatures of the past, and the study of French literature, the other great literature of the present, will lead us towards that American cosmopolitanism which is the antithesis of both provincialism and colonialism. An American cosmopolitanism, I said, for I agree with Coleridge in thinking that "the cosmopolitanism which does not spring out of, and blossom upon, the deep-rooted stem of nationality or patriotism, is a spurious and rotten growth." Stendhal, a Frenchman who did not care for France and who found himself, at last, a man without a country, had for a motto, "I come from Cosmopolis." A fit motto for an

American author might be "I go to Cosmopolis"—I go to see the best the world has to offer, the best being none too good for American use; I go as a visitor, and I return always a loyal citizen of my own country.

As Plutarch tells us, "It is well to go for a light to another man's fire, but not to tarry by it, instead of kindling a torch of one's own." A torch of one's own!—that is a possession worth having, whether it be a flaming beacon on the hill-top or a tiny taper in the window. We cannot tell, how far a little candle throws its beams, nor who is laying his course by its flickering light. The most that we can do—and it is also the least that we should do—is to tend the flame carefully and to keep it steady.

*THE TEACHING OF ENGLISH LITERATURE, WITH
SPECIAL REFERENCE TO SECONDARY SCHOOLS.*

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Those of us who have read Balzac's "Une Fille d'Ève" will recall his description of the depressing education given by the Countess de Granville to her two young daughters. That she might make smooth their path to heaven and matrimony, she subjected them to a regimen that had at least one fatal defect, in that it took no account of their emotions. Its results may be learned from the story, but few thoughtful readers will refrain from asking themselves whether our educational regimen of the year 1896 is not in too many cases followed by results similar in kind if not in degree. Parents and teachers of modern America have doubtless quite different ideals for their children from those of the Countess de Granville, but they often make the same mistake of pursuing these ideals at the cost of their children's emotions, that is to say, at the cost of their real happiness. The ideals of the French mother were summed up in the word "convenience;" the ideals of too many American mothers and fathers, and, I regret to add, teachers, are summed up in the word "utility." Neither set of ideals takes much account of those emotions which are the highest part of our nature and are most impressionable in childhood, for the world of the suitable and the useful is the world of fact, and fact has to be transmuted by the imagination before it can reach and act upon the emotions. It follows, then, that every educational regimen which appeals to the mind through facts should be supplemented by one which appeals to the soul through ideas, that is, through facts transmuted by the imagination. Hence no educational

system is complete that does not include instruction in religion and art—the two chief sources of appeal to the emotions. For obvious reasons we Americans have been compelled to leave religion outside the ordinary school and college curriculum, and this is practically the case with the plastic arts. We are thus reduced to rely mainly on literature and music as sources of appeal to the emotions of our youth, but we have hitherto made insufficient use of both sources.

This was not the case with the best-educated people the world has ever known—the Greeks. Literature, especially poetry, and music, were the basis of a Greek boy's education, and education in these two arts (which it must be remembered were closely connected with religion) led to the culmination of all the other arts in the Athens of Pericles. But the Athens of Pericles had its weakness as well as its strength, and the world has moved forward greatly in 2300 years, hence the basis of a boy's education should be far broader now than it was then. Yet while broadening the base and shifting its center, we should not be rash enough to cast away its old material. Poetry and music are still essential to any sound educational system, and this being so, the inquiry how they may best be taught is of great interest, and, if confined to the first named, leads us to the main topic of this paper.

I use the term poetry advisedly, for it best represents the literature of the imagination, and that is what we have to deal with, as we shall see at once if we will stop to do a little analyzing. What did the Greek teacher expect his pupils to get from their study of Homer? Probably two sets of good results, one affecting the mind, the other the soul. From the "Iliad" and the "Odyssey" the Greek boy could derive much information with regard to religion, genealogy, and so-called history. They served also as reading books, and took the place for a long while of formal grammars and rhetorical treatises. In other words they were to him a storehouse of facts. But they also filled him with emotions of pleasure. They charmed his ear by their cadences; they charmed his inner eye by their pictures; they charmed his moral nature by the examples they offered him of sublime beauty and bravery and patriotism. In other words they were to him a storehouse of ideas, and this in the eyes of his teacher was doubtless their chief value. But now-a-days we need not use poetry as a storehouse of facts, and we need to use literature for this purpose only so far as a good style helps in the presentation of facts, as, for example, in the case of history. With our long list of sciences, natural and linguistic and moral, we are in no danger of ignoring the world of facts and are therefore free to use literature, especially poetry, in order to appeal to the emotions of the youth under our charge. Hence

in inquiring how we may best teach literature, we are really inquiring how we may best teach the literature of the imagination,—that is poetry in a wide sense,—for it would seem that literature used as a storehouse of facts might be taught like any other subject in the domain of facts.

But, you may ask, while all this is true enough, what has it to do with the practical teaching of literature? I answer that it has everything to do with it. If the chief reason for teaching literature be the fact that we shall thereby best appeal to the emotions of our pupils; if literature is to be used pedagogically as a storehouse of ideas rather than of facts, what is one to say of the amount of time given to the study of the history of literature and to those critical, philological, and historical annotations which fill most of our literary text-books? The history of literature is important enough, but it belongs to the domain of fact, it does not appeal primarily to the emotions. It is well for a child to know the names of great books and their authors; it is just as well that he should not say that Fielding wrote "Tom Jones' Cabin," or that Telemachus was a great preacher of the seventeenth century, as I have known university students to do. But if literary history really appealed to the emotions, if it vitally affected any pupil, would he make such mistakes? Literary history belongs to the domain of fact just as much as geography does, and the ability on the part of a child to reel off the names of authors and their dates is just as useless as his ability to tell you the capital of Bolivia or to draw you a map of Afghanistan. A certain amount of literary history is useful, the amount given in Mr. Brooke's primer and in Mr. Matthew's recent volume on American literature, but not a bit more, for as intellectual training literary history "simply isn't in it" with other studies, if I may be permitted to employ an expression consecrated to the use of the jaunty young professor whom Milton has the misfortune to bore.

But if teaching the history of literature be beside the mark if we wish to reach the emotions of our pupils, what are we to say of criticism? I cannot see that we can say anything different. That pupil of mine who called Cowper's lines on the receipt of his mother's picture out of Norfolk an "ode" made an utterly absurd mistake, but I am not at all sure that he would have been essentially better or happier if he had not made it. Critical appreciation is certainly better than uncritical, but after all appreciation is the main thing and must precede criticism. Just how much critical, philological, and historical elucidation is needed to make a poem intelligible, for of course it has to be apprehended intellectually before it can produce its full emotional effect, is a hard matter to decide, but I am sure that the amount varies with the ages of the pupils. The younger the pupil,

the simpler and less numerous the teacher's comments should be, for he has no business to be dealing with an obscure poem, and he must remember that he is not, or should not be, trying to teach his pupil facts. I am forced to conclude, then, that the common practice of putting into the hands of pupils a certain number of fully annotated classics with the understanding that the said unfortunate pupils are to be examined on the numerous facts contained in the notes and introductions, whatever may be claimed for it by College associations or by sinful editors like myself, is not the very best way of using literature as an appeal to the emotions of the young. Criticism, philology, and history are admirable handmaids to literature, but they are not literature, and they will not help us much in an appeal to the emotions. To make this appeal we must bring pupils in contact with the body of literature, and here is the crucial point of the problem before us.

But is not this to play into the hands of men like the late Professor Freeman, who opposed the establishment of a chair of literature at Oxford on the plea that we cannot examine on tastes and sympathies? If we are to make a minimum use of criticism, philology, and history, what manner of examination shall we be able to set for our classes in literature? To this question Mr. Churton Collins replied that we ought to examine Aristotle, Longinus, Quintillian and Lessing,—that is to say, in criticism. A very good answer so far as university students are concerned. The history and theory of literary composition, especially of poetry, should be included in every well-organized curriculum, and any competent teacher can examine on them. But though these studies may chasten the emotions, they do not primarily appeal to or awaken them, and for the purposes of the elementary teacher they are almost useless. Are such teachers, then, to be debarred from making use of those departments of literary study that admit of being tested by examination? I answer, yes, at least so far as their main work is concerned. A small amount of literary history may be required and examined on, and perhaps a tiny amount of criticism but for the most part school classes in literature should go scot-free from examination.

This will seem a hard saying to teachers who are enamored of school machinery, who teach by cut-and-dried methods, and regard the school-day as a clock face with the recitation hours corresponding to the figures and themselves and their pupils to the hands. But the literary spirit and the mechanical spirit have long been sworn enemies, for machinery has no emotions; so for the purposes of this paper we need hardly consider the mechanical teacher, who had best keep his hands off literature. The born teacher, the teacher with a soul,—

and I am optimist enough to believe that many of the men and women in this country who are wearing their lives away in the cause of education belong to this category—will be glad to believe that there is at least one important study that need not and should not be pursued mechanically. The trouble will be not so much with the pupils and teachers as with the parents and statisticians who want marks and grades and that sort of partly necessary, partly hopeless, thing. Now I have not the slightest idea how a child can be graded or marked on his emotions, yet I am sure that all teaching of literature that is worthy the name takes account of these chiefly. If this be true, should we not be brave enough to let the machinery go, and confine ourselves to the one pertinent and eternal question how young souls can be best brought in contact with the spirit of literature? If I may judge from my experience with college work, covering several years, and from my briefer experience with school work, I am forced to the conclusion that sympathetic reading on the part of the teacher should be the main method of presenting literature, especially poetry, to young minds. I have never obtained good results from the history of literature or from criticism, except in the case of matured students, and I never expect to. I have examined hundreds of papers in the endeavor to find out what facts or ideas connected with literature appeal most to the young, and I have found that in eight out of ten cases it is the trivial or the bizarre. I remember a curious instance in point. I had been using Gosse's "History of Eighteenth Century Literature," and I told my class to give a brief account of the life of Alexander Pope. Judge of my astonishment when I found that three fourths of a large class, had without collusion and no matter what the merits of the individual paper, copied verbatim the following sentence "Pope, with features carved as if in ivory and with the great melting eyes of an antelope, carried his brilliant head on a deformed and sickly body." Fortunately in this case the trivial facts retained were rightly applied. In another case I was gravely informed that the poet Collins died "of a silk-bag shop," information that completely staggered me, until I found that Mr. Gosse had with quite unnecessary particularity stated that Sterne died in "lodgings over a silk-bag shop." Of course, I need not cite further examples of utter and ridiculous confusion of names, for such examples are familiar to you from your own experience. What I need to point out is that these mistakes are not due to the stupidity of our pupils or to our own bad teaching, but to the fact that the history of literature is drier than mineralogy to any one who is not fairly well read to start with. Much the same thing can be said of criticism, only the chances of making mistakes are magnified through the elusive nature of the subject. It is, of course,

well to give a child some interesting information about great authors, and to try to teach him the distinctions between the broader categories of literature, but after this it seems to me that the primary and secondary teacher should rely mainly on sympathetic reading. Certainly this is my experience with younger students. Whenever I find their attention flagging, I begin to read and to make my comments as brief as possible. In this way I have reached men that seemed at first sight to be hopeless. My most signal success was when I involuntarily set a baseball pitcher to committing certain sonnets of Shakspeare to memory when he was resting from practising new curves. I have always been proud of this achievement, but I believe it would be a by-no-means unusual one if teachers generally would criticise less and read more. Of course the teacher must read sympathetically or the result will be far from good. He must read with sincerity and enthusiasm and understanding, and with critical judgment. To try Browning's "Red Cotton Nightcap Country" on a class of freshman would be simply silly. To abstain from reading Byron to them on account of Mr. Saintsbury's recent utterances on the subject of his lordship's poetry, would be equally silly. But there is fortunately a large amount of English and American poetry that is both first class and suitable to the comprehension of young minds. Where Emerson's "Brahma" will prove incomprehensible, his "Concord Bridge" will stir genuinely patriotic emotions.

You will perceive that I am throwing a great deal of responsibility on the teacher, and I think this is right, for the emotions of his pupils are like the strings of an instrument which he is to touch into life. After a while his intermediation will become less necessary, but at first it is essential in most cases. In spite of what many critics say, it is a fact that with a majority of children whatever literary appreciation they may have lies dormant until it is awakened by some skillful hand. It is better that this hand should be the teacher's, if only for the reason that the performance of such a service will add a pleasure to many a life wearied with the daily rounds of mechanical duty. I am sure that there is no man or woman that hears me who would not be glad to have a half hour set apart in each school day in which arithmetics and grammars could be laid aside and some favorite volume of poetry brought out from the desk and read with sympathy and enthusiasm. If I had a private school of my own, I should surely snatch the time for this, if I had to have fewer maps drawn and fewer examples in partial payments worked. By the power of music Amphion built the walls of Thebes; by the power of poetic harmony we can try to build up the characters of our pupils. "What passion cannot music raise and quell?" asked Dryden, and we may ask the same question

with regard to poetry. I have so much belief in the power of the "concord of sweet sounds" that I am inclined to say that many pupils will receive benefit from merely hearing great poetry read even though it may not convey much meaning to their minds. Take for example this magnificent passage from "Lycidas":

Ay me! whilst thee the shores and sounding seas
Wash far away—where'er thy bones are hurled,
Whether beyond the stormy Hebrides,
Where thou perhaps under the whelming tide
Visit'st the bottom of the monstrous world,
Or whether thou, to our moist vows denied,
Sleepest by the fable of Bellerus old,
Where the great Vision of the guarded Mount
Looks toward Namancos and Bayonna's hold,
Look homeward, Angel, now and melt with ruth,
And, O ye dolphins, waft the hapless youth.

For the elucidation of these eleven lines I felt compelled to give recently nearly three pages of notes—over one page being concerned with the single word "angel." Now I do not believe that the average school boy would have any clearer notion as to who this Angel was or as to what Bellerus, or Namancos mean, but I think that the noble picture of the corpse of Lycidas washed by the sounding seas would appeal profoundly to his imagination and that he would be the better for having heard his teacher read the lines. That he would be the better for nine out of ten of the critical or philological annotations that editors feel compelled to make on the passage I see grave reason to doubt. The fact is that we have let the teacher of the Greek and Latin classics affect us by methods of minute analysis better fitted to the study of a dead than of a living language. These same classical teachers have, too, not a little to answer for on account of the slight they have, time out of mind, put on the purely literary side of their work. How many teachers of Latin when reading Vergil stop to comment on the sonorous quality of such a grand verse as

Infandum, regina, jubes renovare dolorem,

or upon this verse of Horace,

Cras ingens iterabimus aequor,

which suggests comparison at once with Shakspeare's "multitudinous seas" or with Matthew Arnold's

"The unplumb'd, salt, estrangling sea"?

But the mention of Arnold reminds me that the stress I am laying on sympathetic reading of poetry by the teacher is but an amplification of his advice that we should keep passages of great poetry in our minds to serve as touchstones (perhaps tuning forks would be a more

accurate though less elegant metaphor) that will enable us to detect the presence or absence of truly poetic qualities in the verse we read. I should add also that this method of study is strictly in line with the pedagogical methods of Comenius who saw to it that his pupils were put in touch with the subject as a whole before they were set to studying its parts.

There are many other things that I should like to say, but my time is limited. I should like to protest against the use of great literature for exercises in parsing or for etymological or philological investigations—it ought even to be sparingly used for the purposes of reading classes. I should like to protest against the lack of judgment shown by teachers and college professors in the texts they assign for study,—two books of Pope's "Iliad" for example in place of his "Rape of the Lock,"—a matter, however, in which we teachers of English are so far ahead of our friends who teach French and German that perhaps I ought to be thankful for the progress we have made. I should like to insist finally upon what I believe will some day be generally recognized—the supremacy of literature as a study over all others that now occupy the world's attention. For when everything is said, it is literature, and especially poetry, that has the first and undisputed right to enter the audience chamber of the human soul. Painting, sculpture, music, the whole noble list of the sciences, the lower but still important useful arts, may and must continue to appeal and minister to the spirit of man, but artistic prose and poetry are the servants—nay, are they not rather the masters?—on which that spirit has relied from the beginning of time, and on which it will rely till time itself shall end. If this be the true position of literature, who shall affirm that the next generation will not say to its teacher and disciple—"Friend, go up higher?"

LITERATURE IN ELEMENTARY SCHOOLS.

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CHICAGO, ILLS.

The day has passed when one needs to plead for the use of the classics of literature in the elementary schools. Although the young are still given the ordinary in both thought and expression with which to acquire the so-called mechanics of reading, yet the teachers are few who have the hardihood in theory to restrict those little ones to a diet of the commonplace. Here and there is found one, sufficiently flexible of mind and courageous of spirit, to affirm that the mechanical style of

reading with which children in the schools attempt to interpret the beautiful has for its foundation stones the mechanics and the commonplace of the first steps in reading. There is developing a recognition of the demand for the literary whole, not only by the mature, but also by the immature mind. There is less reading of selections which, though beautiful in themselves, are so separated from the description, the argument, necessitating their creation, that they fill no place in the minds of boys and girls having a limited experience from which to construct the omitted parts. Though the schools are moving slowly, often halting on the way, hindered here by deplorable theories based on custom, weakened there by the cause of nature stories and adaptations of the classics written by the non-literary, yet, thanks to those who have blazed the way to a broader and higher view, no time need now be spent in presenting the claims of literature as an element in child life. It is recognized distinctively as a subject in the course of study in the elementary schools, and as such presents two topics for consideration: First, a prescribed course in literature for those schools; second, the method of literature below the high schools.

A discussion of the first topic, a prescribed course, confronts us at the outset with this question: Is there a definite, fixed sequence of subjects in literature as regards either content, or the time of appeal to the child in a regular series of culture epochs? Or, to put it in another way, should there be, in developing a taste for letters, an adherence to a formal order of procedure, as in the development of mathematical insight? Such radical changes are slowly but surely coming into the methods of mathematics with beginners as to raise doubts regarding the existence of a fixed sequence of topics in that formal study. For instance, geometry, with its magnitudes and their relations is now paving the way for arithmetic, instead of following in its train; fractional relations of small quantities, instead of the aggregations in thousands and millions, occupy the young in the school as well as on the play ground; the fixed-unit theory is giving way to that of the movable-unit. If a formal and inflexible course of study for that subject into whose conditions no unstable element enters, has been cramping and misleading, it is needless to ask what would be the influence of the adoption of a theory of the logical sequence of subjects, or of a theory of culture-epochs in the beginning of the development of a taste for the humanities—the most comprehensive of all departments of human inquiry and enjoyment, the one in which the many and varied relations of the heart are portrayed in all the beauty and power of thought and expression. The panorama of life is not opened before us so that for a time we see the mythical only, then gaze upon fairies, then listen to nature's teachings, and finally admire

virtue coming forth triumphant from the warfare of sin. There are beautiful myths that touch the heart and the imagination of the young, but the great body of myths is no more suitable for, or interesting to, the immature minds of children than are all the truths enunciated by Euclid. Without doubt there are times when the mind prefers myth and fable to nature and humanity; but those times cannot be closely classified and graded. With varying degrees and modes of interpretation, the children in the humblest home, the child of cultured parents, the youth, the maiden on the threshold of life, the middle-aged, those in life's declining years,—all are in touch with the thoughts, fancies, and experiences that are spread out on the pages of the world's literature. One single line of reading throughout a year, or a grade, can no more meet the needs of a growing mind than can one article of food build, symmetrically, the body which with that mind constitutes the individual. Let us approach this from another side. It is generally agreed that specialization should be made a distinguishing feature in the later, not the earlier years of school and student life. There should first be laid the foundation for a fellowship, a kinship, with plants, birds, earth, air, water, heroes, heroic deeds, and the other simple things which are the basis of all knowledge. Later, the complexity of this seeming simplicity should be the subject of investigation for those minds that are specially interested in the phase mathematical, scientific, artistic, or philosophical. Notwithstanding the general agreement as to specialization, there is throughout America's schools a marked tendency to omit laying the foundations in familiar acquaintance and fellowship, and to begin by studying minute details. The most painful illustration of this is found in the treatment of the history of our own country. Text-books on United States history treat the colonization and wars of this country as if boys and girls from twelve to fifteen years of age were members of state antiquarian societies, or graduate students at West Point.

A prescribed course in literature is not necessarily arranged with an eye single to a logical sequence of subjects or to culture-epochs. It may be planned with but one object in view, that of making the best a definite and developing part of the curriculum. It may consist of such prose and poetical, such descriptive and dramatic works that one in whom are combined literary tastes and a deep sympathy with child life can find no adverse opinion to pass upon it. Here and there is a syllabus prepared out of a delightful experience in the schoolroom. Such syllabi are in reality formulated accounts of interesting and successful efforts to make this great study of human life a part of the real life of the school. As suggestions of possibilities, as records of the innate love of the young for the beautiful and the true, they are

invaluable. They fill an important place in the teacher's professional library; but however good may be these courses in literature for elementary schools, courses satisfying the child-loving litterateur, syllabi growing out of the experience of artist teachers, they should never be prescribed for the use of any other teacher.

It is here conceded, that in schools having more than one teacher, a prescribed course in mathematics, grammar, and geography is necessary. Some continuity in the treatment of those subjects must be regarded, else there is loss to the pupil in changing from one teacher to another. A hard and fast course in those subjects is not desirable; in practice it is objectionable. Yet there must be some order of presentation observed for the pupils in each given school. In literature, however, this continuity, this order of presentation, is nothing. Here then, may we have a living, vitalizing force, originating in the free play of the power of selection by the teacher. Literature reveals the possibilities of the human soul. Running through every literary production is some one of the fundamental principles underlying the higher life, and this principle woven into the warp and woof of the narration, the novel, the poem, the myth, the drama, suggests to the reader something farther and higher-reaching than the soul itself has yet attained. In all this there is an appeal to the nobler self. It makes that self realize its personal, its individual responsibilities. By putting a prescribed course into the hands of the teacher, this permanent element, the arousing the sense of responsibility through a selecting activity, is ignored. The book, the essay, the poem, may be appreciated, but the teacher goes to the class as the bearer of another's choice; as an inferior acting for a superior; not as one who, having found a joy, a life-giving thought, must share it with the children. It may be urged in opposition to each and every teacher's being the center of this culture-study with the boys and girls committed to his or her care, that some not having a developed taste would carry an inferior grade of reading into the class to be shared and enjoyed. Does this objection imply that one deficient in taste will so treat prescribed readings as to develop in the pupils a love for that which fails to charm the leader? How happened it that the development never came to the teacher? May it not have been that that teacher's teacher in the humanities was an instrument, rather than a torch-bearer? However beautiful, or powerful, an artistic production may be, there develops a feeling akin to the mechanical, if year after year at a stated period one must read a particular myth, story, essay, or poem with a class, regardless of the trend of thought and feeling pervading teacher and children. Both may be in harmony with something else; possibly something new and delightful has come into the

teacher's personal reading, but this peculiarly interesting work must be refused recognition in the very place where it would be a germ, an inspiration. The field of human thought and sympathy is so wide, has so many varieties of plant, springing up here, there, everywhere, that to keep teachers standing by artificially planned flower beds is to defeat the very end for which the short-sighted husbandman planned the bed. The necessity for courses of study in some subjects has been conceded in this paper; yet, today, that necessity demands not half so much attention from those who are close to the elementary schools, as do the narrowing and benumbing influences of minute details in those outlines. There have been written interesting accounts of broad and varied readings with classes of children under fifteen years of age. Was ever such an account written by a teacher carrying out a course prescribed by another in all its minute particulars, and repeated without variation year after year?

So much stress has been laid on freedom of selections in this "the study relating to human nature," because no other of the five co-ordinate groups presents such possibilities for self-developing activity in the teacher. The dead level to which so many of the elementary schools sink will be no more when all through the teaching corps, from the humblest to the most successful, there shall be this intelligent selection and loving sharing of that which touches the life, the heart, of both teacher and child. Then

" From the mountains to the champaign,
By the glens and hills along,
Will come a rustling and a tramping,
Will come a motion as of song."

The second topic suggested for consideration is the method of literature below the high school. Loud are the complaints made by the secondary schools, colleges, and universities, to the effect that students come to them weak in spelling, weaker in punctuation, and weakest of all in their use of the mother tongue. So faint of heart are we as to the propriety of admitting the interesting and the beautiful into our schoolrooms that the first breath of adverse criticism makes us disown them as interlopers. The complaints coming at a time when faith in literature in the schools is just beginning to germinate, tend to weaken that faith, and to concentrate attention on the form side of language, before its use and power as an instrument for the expression of thought have been felt. That the spelling of the young people entering the high schools is poorer than formerly need alarm no one. It has always been so. The same charge was made in the days of Horace Mann, more than a half century ago. The history of this charge, that the spelling in the common schools is not so good as it used to be,

would be an excellent subject for a thesis. Doubtless the writer thereof would find that the charge originated in the first school in which English spelling was taught. The spelling, the punctuation, and more than these, the diction of the young should, be improved, but in the right way. Spelling, punctuation, forms of words, choice of words, construction of sentences, all may be grouped under the head of the technique of language. The same law holds here that prevails in other subjects. Empty forms will not generate content. The resurrection of the meaningless or stilted sentence set for spelling and punctuation, or paraphrases that kill the thought and imagery of the original, and retain the phrases and clauses arranged in reverse order, will not develop beauty and vigor of thought and expression. The seeds of thought must be implanted in the young minds and then the technique be developed out of the resulting imagery and reflection.

In studying a work of literary art there is much danger of excessive critical analysis; and yet, to read with no remark, after all is finished, other than a general one about the beauty or strength of the thought and language, places this whole subject outside of the molding influence of the school, relegating it to each individual. Before conversation is attempted enough should be read to paint a picture in its wholeness, some phase of a thought in its entirety. This whole, acting through association, will suggest other images, will make particulars stand out in bold relief, will often throw new light on some familiar truth or principle.

This year, March gave us no sign of spring. Cold, northeast winds kept the blossoms back. April came bringing no showers. Suddenly all was changed. The breath of spring was like that of summer. Longing for the beauty of water and sky, I went one sultry Sabbath morning to the lake shore. Many had been impelled to go there, and it was a remarkable sight that met the eye. There were gathered men, women, and children; some sitting, some standing, others slowly walking to and fro, but a silent throng. Conversation, there was none. Out upon that wonderful scene, a most gorgeous display of color, went every eye. A haze spread itself above the many-colored waters, so that the line where the earth and sky met was lost to view. Here and there fleecy clouds cast their shadows on the water. Families came to that beach, and as the little ones were lifted from their carriages, they with the older children stood for a moment gazing in open-eyed wonder at that which held all entranced. Here and there a husband and wife, or friends, after long gazing far off on the deep, would exchange a glance that spoke volumes. A father and his young son mounted their wheels, took one long, lingering look, and then with-

out a word rode quietly away. The next day I said to some friends whom I had seen on that beach, "What a wonderful sight that was." Then conversation began. One spoke of the ever-pressing thought that there were as many scenes as there were minds enjoying it, so varied must have been the delicacy of sense and the depth of experience coming from the different homes represented there; or, in other words, said he, the material world is what the mind and its reaction makes it. Another remarked that she did not think so much about this world; she had been realizing that there were things invisible to her, yet seen by a finer type of being. These two threads were taken up and found to be parts of the same idea. After the threads had been woven into the same strand, we closed our conversation with a return to that beautiful whole. Two children talked of that scene. The little girl told her brother of her tender fear because she knew she could not think the thoughts that mamma had. The boy talked of the great worlds he was going to see when he could cross not only Lake Michigan, but the ocean. And they finally came back to that beautiful scene. This interchange of thought was the result of the dynamic power of that scene. Torn to pieces by questions on isolated details, immediately upon the appearance of a color, or a shadow, merely indifferent, monosyllabic replies would have come of it in a forced conversation. As this picture, painted from nature's gorgeous display, and viewed in quiet meditation, acted upon our minds, so the thoughts, fancies, and experiences of mankind, read from the classic page and absorbed in thoughtful repose, will enrich and ennoble the soul of teacher and child.

SCHOOL OUT OF SCHOOL.

BY REV. JOHN. H. VINCENT, CHANCELLOR OF CHAUTAUQUA
UNIVERSITY.

Under the flag of the republic we have a population of about 70,000,000. There are in all kinds and grades of schools—public, private, professional—in round numbers 16,000,000 students. There are therefore out of school at least 54,000,000 people in the United States. It is my mission to-night to speak in behalf of the 54,000,000.

It would be carrying coals to Newcastle for me here to define and to defend the institution we call the school. It is the institution for the promotion of formal training, providing time and place, with a beginning and an ending, with many beginnings and endings, with prescribed courses of study, with teachers of scholarship and tact to guide, restrain, help over hard places and inspire

with right ambition; with students thrown together in rivalry, in friendship stimulating each other to be and to do. The school promotes the habit of intelligent observation. It guides to self-discovery, develops natural gifts, teaches laws of adaptation and expression, develops character, promotes a knowledge of human nature, and fills young life with the joy of thinking. The school opens out wide horizons. It makes recreation possible and profitable. It gives significance to recreation. It kindles living memories that spring from the old school house, college hall, and campus, like a fountain of delight dropping over the arid plains and the rough places of later life in showers of blessings. It imparts honor and prestige in credits, diplomas, degrees, and enduring reputation.

The in-school population, how interesting it is. What good times it has! Here souls find out the laws of life, of adjustment and service, gaining power with the passing years. Here are the leaders of tomorrow in all departments of active life—in the home, the shop, the field, the school, the church, the state. Well may our enthusiasm be stirred as we think of the 16,000,000 under the dome and flag of the American school. Ah! if only they could be kept in school for a longer time! If only we could learn the secret of carrying young life over that perilous period between twelve and sixteen years, turning indifference into enthusiasm and youthful restlessness into unflinching purpose! What regrets would be saved, what lamentations silenced, what higher levels of life and culture attained! But what of the 54,000,000 who are out of school? To you the educators of the people,—of the whole people,—I speak tonight in behalf of the 54,000,000. Your conviction and policy will determine whether or not from the ranks of the 54,000,000 out of school shall come additional millions under your immediate direction. And your treatment of the 16,000,000 must of necessity react upon and influence the 54,000,000.

Let us look at the out-of-school multitude. The vast majority, who are they?

Many of them are those who have taken full courses and after courses in college and university; all the college and university graduates, the products of the professional schools are included in the out-of-school multitude.

Here are thousands who have begun but never completed the college course, millions who have never finished the secondary-school course, millions who have never even entered the grammar school. Some of them have been taught that wealth is a greater power than learning and do not know that although it has greater temporary influence, true learning endures, and perpetuates itself. Some of them suppose that the college course interferes with a man's success in practical life.

What is practical life? The gain of gold, or place, or sensual gratification? Is it not important that a man should be practical as a son and husband and father and friend, a gentleman in society and a member of the church? Is not this as important as that he should be able to make money in the shop, in the field, in the bank?

And millions of the out-of-school multitude I am sorry to say, who have never been in any school whatsoever, these must support, or help to support the family. They have never supposed that education belonged to their class. To read, to write, to cipher, they have accounted privileges for even a higher class than themselves, and as for the higher education they have been taught to understand that it would be bad for them as a class, unfitting them to serve, to occupy the humbler spheres of social life from which they might look up to their superiors and sovereigns in church and state. They were never brought up to understand that priests and presidents are their servants, and that the lowly, ignorant, and despised are inheritors of all natural rights and of all the possibilities of culture which endowment guarantees them, never knew that the stars over their heads are their stars and the landscape theirs. They have not been taught that the great object of life is to grow into the nobility of being and to be fitted for the eternal inheritance of light and liberty, and the joy of life—the rapture of life. They have thought that to dig and delve, to pay taxes, fight the common foes of vegetation and serve the masters of civilization fulfill their mission. Alas for the stupid, the ignorant, the servile, the blind, the downtrodden masses even in a republic.

Men differ in endowment, relations, and responsibility, but they are men and all are members of families and of society; all are citizens; all are immortal souls and all have some endowment—one talent, or two, or ten. Every man has a right to know all that he can know, to be all that he can be, to do all that he pleases to do so long as in the exercise of this right he does not prevent his fellowmen from the enjoyment of precisely the same privileges. No man and no class of men have the right to predict hopeless inferiority of other men so as to assign them to continued ignorance and subjection. No man and no class of men have the right to deprive any man of the development and satisfaction which comes from culture and thought. The mere circumstance of wealth and social position do not determine the limits of a man's intellectual opportunity. Culture does not unfit for honest labor. All men may live and think, and read and talk, so as to become more interesting to their own children; they may all come to look with more intelligent delight on fine pictures and lovely prospects and to say pleasant things about them in their own simple, unaffected speech. Every man by a measure of culture entirely possible to him

may gain in attractiveness and helpfulness to some other souls and thus enrich his own and other's lives. Every soul on the planet, however low and limited, has a right—is in duty bound—to read and think, to aspire and resolve and attempt. And every man who has made any gain is also in duty bound to help to the same and more every man below him. Away with the aristocracy of learning which looks with contempt on the unlearned, and which would so restrict the opportunities of culture as to leave any man or any class of men under the bondage of ignorance and superstition. By pressing upon men the loftiest ideals, the largest possibilities, the number of thinking self-asserting, self-respecting men and women will be increased. The boundless expanse of the azure and the wealth of the midnight glory that fills it would pay if only one soul were awakened to the splendor of his inheritance. I would ensphere every humblest, weakest human life with the boundless and radiant heavens.

The problem now before us is to reach the out-of-school multitude; to put as many as possible of them in school; to provide for the others—for every one of the others—a school out-of-school. They may not go to the "little red school house" nor to the ward schoolhouse. They may not go to the academy, the college, the university. School out-of-school is possible to all of them.

1. We must bring into school the children who are now allowed by their parents to neglect it. The whole community must be a committee to enforce the law of compulsory attendance. Personal appeal must be made to the girls and boys themselves. Parents must be awakened to a sense of their responsibility. Laws must be enacted and executed. We must keep hold especially upon the boys who are in danger of leaving the public school before they are competent to form a correct estimate of its value, and who, when it is too late to retrace their steps, awake to the greatness of the blunder they were permitted to make.

I regard it as one of the important problems of the age: How to retain in the public school boys between the ages of twelve and sixteen. How shall we overcome the indifference of this period of young life? How develop ambition and purpose? If this were accomplished, personal appreciation and enthusiasm would send multitudes into the higher schools who are now doomed to lives of hopeless regret and often of self-contempt.

2. I plead tonight for the out-of-school people to whom a period in the schoolhouse is now out of the question. We must teach them that life itself is a school, and that every man, however busy with what are called practical affairs, may easily subject himself to training under plans of self-improvement. He may become a pupil with books,

teachers, terms, vacations, habits of thinking, reading, conversation, observatories, laboratories and other facilities for the promotion of education. I cling with tenacity to the old doctrine that every man's life is subject to the divine care and government, that under this control he may turn every day to good account in his personal improvement, and that the forces of the universe are pledged to aid the man who with firm resolve seeks personal strength and culture.

3. We must teach adults, who form the vast majority of the 54,000,000 out-of-school, to appreciate the educational possibilities of mature life. Michael Angelo, after he was eighty years of age, was seen standing in front of a cathedral, inspecting with intentness certain architectural lines and forms. Some one asked him what he was doing. The old artist replied: "I am still at school." It is a great mistake to assume that because one is no longer young and susceptible he is no longer subject to the powers which mold, change, exalt, refine and ennoble the human soul.

In fact men and women of mature years are more likely to appreciate education than are the young. They have gained by observation masses of knowledge more valuable, a great deal, than the mere knowledge gained in books. Their minds are more vigorous. They have been compelled to give attention in some directions determined by the necessities of practical life, and are thereby the better qualified to give attention to other and higher subjects. Adults need hope and confidence. They need emancipation from the old doctrines which tend to pessimism and despair, taught them sometimes by the church and forced upon them through the misapprehensions of young people, and what they need now above everything else is self-confidence. Let us exalt the formal institution, but that missed, all is not lost. Remember Abraham Lincoln, Washington Irving, William Shakespeare, Samuel Drew, Elihu Burritt, Herbert Spencer, Robert Browning, and a score besides, who have learned even outside the university, the elements of true education; the beginnings of knowledge; capacity to know more; ability to know more; insatiate desire to know truth; wisdom in the application of the knowledge gained; and a well-balanced character. Said Sir William Jones, "With the fortune of a peasant I gave myself the education of a prince."

Let us remember that the best students are full grown men and women from thirty to sixty. President G. Stanley Hall declares that the human brain reaches its maximum size or weight at sixteen or fifteen, but it is unique among the organs in that it takes a decade longer with vast modes of changes in its action and increased power before it reaches full functional maturity. Plato said that "mind touches its zenith at forty-nine." There are men who linger in the

zenith for decades. Every man should be a student all his days. On the tomb of John Richard Green, the historian, is this epitaph: "He died learning." Who is the poet who sang:

" But why, you ask me, should this tale be told
To men grown old or who are growing old?
It is too late! Nothing is too late
Till the tired heart shall cease to palpitate.
Cato learned Greek at eighty; Sophocles
Wrote his grand *Œdipus*, and Simonides
Bore off the prize of verse from his compeers
When each had numbered more than four-score years;
And Theophrastus at four-score and ten
Had but begun his characters of men.
Chaucer at Woodstock with the nightingales
At sixty wrote the *Canterbury Tales*;
Goethe at Weimar toiling to the last
Completed *Faust* when eighty years were passed.
These are indeed, exceptions; but they show
How far the Gulf Stream of our youth may flow
Into the Arctic regions of our lives
When little else than life itself survives.

" Shall we then idly sit us down and say,
The night hath come; it is no longer day?
The night hath not yet come; we are not quite
Cut off from labor by the failing light;
Some things remain for us to do and dare;
Even the oldest one some fruit may bear:
For age is opportunity no less
Than youth itself, though in another dress,
And as the evening twilight fades away
The sky is filled with stars invisible by day."

4. I am here to insist that for such people, the middle-aged, the old people of the community, the out-of-school multitudes of society, courses of reading and study should be provided. General and special suggestions should be given and provisions made by competent leaders. They should be aided in the selection of books. There should be provided for grown people organizations, societies, clubs, institutes, assemblies, with lectures, studies, readings in literature, art, science—in all the sciences. This course should be selected by the scholars who know the people. The course should not be long or elaborate. It should not be too short nor superficial. It should cover a very broad and comprehensive field, and, if possible, it should be the field which the preparatory and college course covers. It should kindle a taste for reading of the better kind. It should reveal to every man his aptitude and delight, and should then supply advanced courses of reading. This provision for the out-of-school

adult should cultivate the *esprit de corps*, kindling the pleasure of fraternal fellowship, giving to the older folks a taste of the sentiment which adds so much to the life of the college. There is nothing this age needs more than play, recreation, the kindling and stimulating of the ideal. The humdrum of life deadens. I plead for the awakening of the imagination, the spirit of hope, confidence, in the possibility of change in the ruling motive even of an old man's life, and visions of ascent and power. Mr. Charles Whibley in "The Nineteenth Century," wrote a foolish thing when he characterized one of the popular movements of our day "the farce of University Extension." We want provisions for education in all lines, for all peoples of all ages, in all wise ways. We want the spirit of the school in the home, that the authority, influence, and example of the home may be felt in the school.

5. This suggests the thought that there should be promoted among all out-of-school people a hearty co-operation with existing educational institutions. We must make more of home. In it must be awakened the true ideals of education. Here must be laid the foundations of character, self-control, habits of observation, the anticipation of real life in the outside world, and the appreciation of all that makes for solidity, stability, and righteousness. The kindergarten must be put into every family. The best work that the kindergarten can do is a work for mothers.

All the educational factors must co-operate—the home, the public school, the church, the local press, the lyceum, the public library, the museum, the summer assemblies, reading circles, and whatsoever else makes for the culture of the people. This co-operation is needed to promote more discriminating and effective teaching in nursery and kindergarten; to economize time at home and at school; to increase the number of students in the advanced schools and colleges; to widen the teacher's sphere and save him from the dwarfing effects of his profession; to bring into mutual sympathy and assistance, teachers and parents and the non-professional educators of the country; to exalt the teacher's profession in the estimate of the best society and to increase popular faith in the public school, the college, and the university.

When college men come to understand the people, their sense, their teachableness, their earnestness, their real intellectual strength, their knowledge of human nature, the college will respect the people more, and be itself helped by closest intercourse with them. It is in this way that the "correspondence system" of education, so often condemned by the scholars, so often a boon of inestimable value to the people, accomplishes so much good. There are in this correspond-

ence system these useful features: (1) a prescribed course; (2) one subject taken up at a time; (3) a lesson outlined and forwarded to the student; (4) lesson reports by the student returned to the teacher, by him corrected and returned to the pupil; (5) the complete recitation, every part, every proposition of the lesson being studied by one pupil; (6) in this system there is no undue haste; (7) no personal embarrassment; (8) access is had to the best of teachers; (9) it is a system financially economical; (10) the student under this system is likely to be mature and eager; and (11) supplemental work is practicable, including local teachers selected by the student himself from the best brains of the community, and with the possibility of local lectures. It is by this unpaid voluntary band of teachers in the community that the noble conception of Principal Fairbairn may be realized: "The student of letters who longs to be the servant of men."

6. There is a power which would promote more thorough co-operation, stimulating adults to the pursuit of knowledge, interesting the home to a greater degree in educational processes, in literature and in the higher ends of living. This power we greatly need in the republic, and although it does not seem at first thought to be as potent as my emphasis indicates, it has really more to do with the cause of out-of-school culture than any other. We all know the power of atmosphere. We all know how much more intellectual work can be accomplished when our conditions are harmonious and full of sympathy and hope. I have insisted upon co-operation. But the only basis of effective co-operation is in sympathy, mutual good will, a sense of brotherhood filled with patriotic ideas and impulses. We need a pronounced American spirit, patriotic, loyal, and filled with the spirit of harmony and good neighborhood. To promote this, prejudices must be overcome, rigid partisan feeling mollified, and our people become broadened with toleration, illuminated and warmed with charity. The American people, who should be the most generous, are often the most bigoted; and divisions exist between classes and thinkers, representatives of political parties and of schools of religious thought, which prevent sympathetic co-operation. We must put an end to political and sectarian feeling in the public school system. I believe firmly in the power of religious opinions and religious aims in giving earnestness to life and making every man eager to attain his best. I believe in the conviction of so many of our people that religion and education should go hand in hand and that the crown of intellectual culture is ethical and spiritual character. But the differences among us in matters of religion more or less limit the possibilities of a true culture, and prevent the perfect harmony which is necessary to perfect co-operation.

There are men and women who make no religious profession, who have nothing to do with the church, who have large influence in many ways over the young people of society. Because they owe no allegiance to any church the great body of church members virtually repudiates them and counts them out when considering plans for social and educational improvement. The men and women to whom I refer believe in what they call "common sense" and in a general way in what we call goodness and righteousness. They do not, however, make nice theological discriminations. They do not care for theology. They do not stand for ecclesiastical institutions. They neglect and sometimes repudiate them. But most of these people have pronounced ethical convictions. Why should not all these non-evangelical, non-religious, so-called skeptical elements, on the one hand, and the most pronounced religious and ecclesiastical elements, on the other, co-operate at least to some extent in the promotion of the things in which they all believe? Why should they be required, or why should they consent to give up the ethical insistence even though they cannot agree upon the antecedent religious doctrines out of which our standards of ethics spring? Why should they not stand with us? Why should not we be glad to have them stand with us in the interest of our young people,—of all our young people—that among them we may jointly promote reverence, truthfulness, sobriety, purity, economy, good will, courtesy, manly strength, womanly grace, propriety of deportment, and a score of qualities and virtues which, whether you call them Christian or not, belong to the highest and best culture.

Whether we find incentive and inspiration to these best things in a Presbyterian church, at a Roman Catholic altar, in a Methodist revival or in the freethinker's school of ethical culture, why should we not be willing to stand together and try to promote the qualities which all approve? The ideal and aim are worth something, and if there be any radical defects in the hypothesis or the process by which any one class or school of thinkers seeks to secure its object, the experiment in good faith will in due time sufficiently show where the antecedent theoretical defect lies and lead gradually and finally to its correction. What I insist upon is that we should all co-operate generously and with sympathetic toleration in trying to make practical and effective these larger ideals of national, associated, educational, personal life.

Why shall we not make use of everyday, worldly men who make no religious profession, and yet who have standards of righteousness, uprightness, and wise deportment which they are as much bound to promote among our young people as are the most spiritually minded and professing Christians, and which they are perhaps as anxious to promote as many people of more formal, emphatic, and outspoken faith? And

with what practical sense such men may reach and influence the boy of our age! Let us work with sturdy, everyday men as far as we possibly can. In very many cases these so-called worldly men, in the church and out of it, would stand by teachers and other citizens in discouraging bad habits in children and in promoting a real religious faith and the virtues which make for social progress and national security.

Every such sympathetic impulse on the part of non-Christian men, and every such effort to advance the better things of social life will make them the more eager personally to enjoy the literary opportunities of the country and of the age.

In the furtherance of this common end, the public school system of America must serve no sectarian interest. Methodists, Unitarians, Roman Catholics, Jews, Baptists, agnostics, should have equal opportunity, and no representative of any form of religious faith in the republic should at any time justly be grieved or made sore by allusions, references, policies, or influences exercised in the schoolroom. We must avoid bitterness. We must cultivate good will. We must stand by the public school as the representative of the nation and of the people. We must be generous in speech. We must promote true brotherhood among the most diverse elements of our population, and when the time comes and the issue is made, every genuine American must stand for the defense of the public school and the protection of the public treasury with an emphasis which anti-American elements in our population cannot misunderstand. Even in such a conflict as that we must avoid undue severity of speech. There is one place where Americans can express themselves, their convictions, their feelings, their purpose. Concentrated indignation and unflinching purpose put into a silent ballot is worth a hundred inflammatory resolutions of wrath and the glow of a thousand flaming effigies. Let us have justice, righteousness, but let us have good will and good neighborhood, and we thus create an irresistible power of popular opinion and purpose which must tell not only on the schools themselves, but upon the multitudes who are out-of-school.

May I venture to suggest that a positive religious influence entirely free from everything sectarian may be exerted by these everyday, so-called worldly men and by day-school teachers who are scrupulously careful not to obtrude denominational teaching. Boys may be reached by teachers who are genuine in personal character and who use words without cant and charged with profound conviction.

How wisely Thomas Hughes in "Tom Brown's School Days" gets forth, for example, the power of careful speech, the use of a few words by the right man at the right time, in that scene which no one can

ever forget where Tom's father accompanies him on his way toward Rugby. They stop at the Peacock in London, have supper together, and before the boy retired his father said to him: "And now, Tom, my boy, remember that you are going at your own earnest request to be chucked into this great school like a young bear, with all your troubles before you—earlier than we should have sent you, perhaps. If schools are what they were in my time, you will see a great many cruel, black-guard things done and hear a deal of foul, bad talk. But never fear, you tell the truth, keep a brave and kind heart, and never listen to or say anything you would not have your mother and sister hear, and you will never feel ashamed to come home, or we to see you."

"The allusion to his mother made Tom feel rather choky, and he would have liked to have hugged his father well if it had not been for the recent stipulation that kissing should now cease between them. As it was he only squeezed his father's hand, and looked bravely up and said, 'I will try, father.'

" 'I know you will, my boy.' Tom went upstairs, and still thinking of his father's last words and the look with which they were spoken he knelt down and prayed that come what might he might never bring shame or sorrow on the dear folk at home."

The stroke which pleases me most in connection with this period in Tom's history is the statement that the Squire all the way up to London had pondered what he should say to Tom by way of parting advice—something that the boy could keep in his head ready for use. It pays one to read the meditation which the squire conducted before he finally decided what to tell the boy. I have no time now to read that part of this most interesting story. Of course no man or woman will undertake to teach boys who has not read carefully "Tom Brown's Schooldays."

In all this work of incidental or indirect religious teaching, in all this attempt to cultivate a common sympathy among the divers classes of our population, with the public school teacher, is the initiative. He should have in his mind all the while not only the intellectual gain but also the moral and spiritual growth of the pupil before him; and not only the pupil but the parents and the home which the pupil represents.

How much might be done toward popular education where this large body of popular sympathy is secured, by the recommendation of books for the pupils and parents to read at home. How much the public school might do if it were to give personal suggestions and appeals, and send to the homes of the pupils literature touching the practical questions of domestic life which affect health, economy, comfort and true recreation! Think of the effect if the public

schools of America were wisely to enter protest against the annual waste of money by selfish indulgence in so many slight matters, in things themselves harmless as well as those that are injurious, and think how economy might be promoted by which home libraries might be built up, and rational, educating, and delightful recreations enjoyed.

When once the people out-of-school become students and popular sympathy and co-operation are obtained, how certainly must society be improved.

Thus we shall give to poor and busy people a larger world to live in, worthy ideals to inspire them; exalted associations with the best characters in literature and in active life; the horizon enlarged and illuminated; the weariness and monotony of daily occupation relieved; true aspiration and personal influence intensified; the lowliest labor transformed into a lofty and dignified ministry; millions of people rescued from self-contempt, frivolity, and folly; the drudges of society, the overworked masses, finding the new joy which comes from a love of literature and science, and interest in history, and delight in art; children learning how from humblest homes broad avenues reach out into the highest places; plain homes made centers of beauty, decorative art in humblest places contributing to a genuine aesthetic training.

Thus the education of the people out-of-school must tend to the dignifying of labor.

Have you never thought that there are two distinctly marked classes of very poor people; that one, though desperately poor, may belong to the highest and most aristocratic society in the land, while the other, raised in poverty, feeling the bitterness of it, may be personally reduced by it, humiliated, degraded, and full of self-contempt?

But a family may be raised in poverty and its members never know that they are poor. They must work. They must all work. They must work very hard. But they have high thoughts, much love, few books, but good books, lofty aspirations, unfailing self-respect. The pictures on the wall are cheap but they are good. Little memorials are found here and there, coming perhaps from another generation, souvenirs,—a bit of Parian marble, fine china, a costly book, a piece of old furniture, a few faded letters,—but the intelligence of two generations or more throws its spell over the present, and the children of the family grow up to recognize themselves as belonging to the very best society. They never think of money having anything to do with determining whether society is good or not. It may be some dear old grandmother sits in her chair chattering about better days; tells sweet stories of the past; and keeps always at that fireside images

of life in a home where literature, art, and piety were appreciated. Thus the education of the people in the past has its effect on the family for generations.

We must train the people to understand that no trade is degrading when pursued by a man or woman of true ideals, pure motive, and holy purpose. Do you remember the Man of Nazareth, who washed the feet of his disciples? Who ever thinks of his act as a degradation? See the ministry and meaning of it all in the statement of the historian who records the fact: "Jesus knowing that the Father had given all things into his hands, and that he came forth from God and goeth unto God, riseth from supper and layeth aside his garments; and he took a towel and girded himself" and washed the feet of his disciples. A man can afford to do what the world accounts the basest service if only his alliances are divine and his consciousness replete with the knowledge of his infinite relationships.

"Do you think," said a poor sewing girl to the daughter of a wealthy citizen in one of our enterprising American towns—"Do you think that your father would let me come at some time to your house to look at a fine copy of one of Raphael's Madonnas which, I am told, you have? Some one told me that when your father was in Europe he bought many good pictures, and that among them he has a fine copy of one by Raphael. I have been reading and studying about Raphael, but have only engravings and photographs to aid me. I should so much love to see a good copy in color. The original I may not hope to see."

The daughter of the millionaire replied: "Why of course you can come. My father would be glad to have you look at the pictures. We have lots of pictures. I do not know whether we have any copies of Raphael's or not, but we have lots of pictures. Nobody looks at them at our house. They hang on the walls. They decorate the rooms beautifully, but I never give any attention to them as pictures. Of course, father would be glad to have you come."

One day the sewing girl modestly calls at the home of luxury. She is ushered into the parlor. The windows are opened to give her the best light. She stands before the one of which she has read so much. She studies it carefully. Critically as she stands there she reads passages from art critics, which she has read over and over again. She discovers tone, touch, expression, and a charm which the millionaire and his daughter never thought of looking for. She goes away inspired. She carries the picture in her thought into her daily labor. She is invited to come whenever she pleases, for as the daughter of the millionaire says: "Nobody here cares for these things except as decorations for the parlor. You will always be welcome." Will you

tell me who owns that picture in the parlor of the millionaire? Who owns it? Is it the millionaire or the sewing girl?

In this way the architecture of the town, of its public buildings, and of its private mansions; the libraries, the museums, the gardens, and all the provisions of our increasingly generous civilization belong to the people themselves. To the people who know, who think, who have taste, who love, who live to be and to know and to do, and who constitute the true aristocracy of the republic.

In your efforts, O teachers of this royal generation, apply yourselves with diligence, fidelity, and enthusiasm to the 16,000,000 within the school, but every day in your thought, in your aspirations, in your endeavors, remember that you also are charged with the responsibility of teaching and bringing into a school of their own the 54,000,000 out-of-school!

NATURE STUDY AND MORAL CULTURE.

BY DAVID STARR JORDAN, PRESIDENT OF LELAND STANFORD JR. UNIVERSITY, CALIFORNIA.

In making a plea for nature study as a means of moral culture, I do not wish to make an overstatement, nor to claim for such study any occult or exclusive power. It is not for us to say, so much nature in the schools, so much virtue in the scholars. The character of the teacher is a factor which must always be counted in; but the best teacher is the one that comes nearest to nature, the one who is most effective in developing individual wisdom. To seek knowledge is better than to have knowledge. The essence of character building lies in action. Precepts of virtue are useless unless they are built into life. At birth, or before, "The gate of gifts is closed." It is the art of life, out of variant and contradictory materials passed down to us from our ancestors, to build up a coherent and effective individual character. Character-building is action, not imitation. The chief value of nature study in character-building is that, like life itself, it deals with realities. The experience of living is of itself a form of nature study. One must, in life, make his own observations, frame his own inductions and apply them in action as he goes along. The habit of finding out the best thing to do next and then doing it is the basis of character. A strong character is built up by doing, not by imitation, nor by feeling, nor by suggestion. Nature study, if it be genuine, is essentially doing. This is the basis of its effectiveness as a moral agent. To deal with truth is necessary if we are to know truth when we see it in action. To know truth precedes all sound morality.

There is a great impulse to virtue in knowing something well. To know it well is to come in direct contact with its facts or laws; to feel that its qualities and forces are inevitable. To do this is the essence of nature study in all its forms.

The claim has been made that history treats of the actions of men, and that it therefore gives the student the basis of right conduct. But neither of these propositions are true. History treats of the records of the acts of men and nations. But it does not involve the action of the student himself. The men and women who act in history are not the boys and girls we are training. Their lives are developed through their own efforts, not by contemplation of the efforts of others. They work out their problem of action more surely by dissecting frogs or hatching butterflies than by what we tell them of Lysurgus or Joan of Arc. Their reason for virtuous action must lie in their own knowledge of what is right, not in the fact that Lincoln or Washington or William Tell or some other half-mythical personage would have done so and so under like conditions. The rocks and shells, the ^ frogs and lilies always tell the absolute truth. Association with these, under right direction, will build up a habit of truthfulness which the lying story of the cherry tree is powerless to effect. If history is to be an agency for moral training it must become a nature study. It must be the study of original documents. When it is studied in this way it has the value of other nature studies. But it is carried on under great limitations. Its manuscripts are scarce, while every leaf on the tree is an original document. When a thousand are used, or used up, the archives of nature are just as full as ever. From the intimate affinity with the problems of life, the problems of nature study derive a large part of their value. Because life deals with realities, the visible agents of the overmastering fates, it is well that our children should study the real, rather than the conventional. Let them come in contact with the inevitable instead of the made up; with laws and forces which can be traced in objects and forms actually before them rather than with those which seem arbitrary or which remain inscrutable. To use concrete illustrations, there is a greater moral value in the study of magnets than in the distinction between shall and will, in the study of birds or rocks than in that of diacritical marks or postage stamps, in the development of a frog than in the longer or the shorter catechism, in the study of things than in the study of abstractions. There is doubtless a law underlying abstractions and conventionalities, a law of catechism, or postage stamps, or grammatical solecisms, but it does not appear to the student. Its consideration does not strengthen his impression of inevitable truth. There is the greatest moral value as well as intellectual value in the independence that comes from know-

ing, and knowing that one knows and why he knows. This gives a spinal column to character, which is not found in the flabby goodness of imitation or the hysteric virtue of suggestion. Knowing what is right and why it is right before doing it, is the basis of greatness of character.

The nervous system of the animal or the man is essentially a device to make action effective and to keep it safe. The animal is a machine in action. Toward the end of motion all other mental processes tend. All functions of the brain, all forms of nerve impulse, are modifications of the simple reflex action, the automatic transfer of sensations derived from external objects into movements of the body.

The sensory nerves furnish the mind of man all knowledge of the external world. The brain, sitting in absolute darkness, judges these sensations, and sends out corresponding impulses to action. The sensory nerves are the brain's sole teachers, the motor nerves and through them the muscles are the brain's only servants. The untrained brain learns its lessons poorly and its commands are vacillating and ineffective. In like manner, the brain which has been misused shows its defects in ill-chosen action, the action against which nature protests through her whip of misery. In this fact that nerve alteration means ineffective action, lying brain and lying nerves, rests the great argument for temperance, the great argument against all forms of nerve tampering, from the coffee habit to the "protracted meetings."

The senses are intensely practical in their relation to life. The processes of natural selection make and keep them so. Only those phases of reality which our ancestors could render into action are shown to us by our senses. If we can do nothing in any case we know nothing about it. The senses tell us essential truth about rocks and trees, food and shelter, friends and enemies. They answer no problems in chemistry. They tell us nothing about atom or molecule. They give us no ultimate facts. Whatever is so small that we cannot handle it is too small to be seen. Whatever is too distant to be reached is not truthfully reported. The "X-rays" of light we cannot see, because our ancestors could not use them. The sun and stars, the clouds and the sky, are not at all what they appear to be. The truthfulness of the senses fails as the square of the distance increases. Were it not so we should be smothered by truth. We should be overwhelmed by the multiplicity of our own sensations, and truthful response in action would become impossible. Hyperæsthesia of any or all of the senses is a source of confusion, not of strength. It is essentially a phase of disease, and it shows itself in ineffectiveness,

not in increased power. Besides the actual sensations, the so-called realities, the brain retains also the sensations which have been and are not wholly lost. Memory pictures crowd the mind, mingling with pictures which are brought in afresh by the senses. The force of suggestion causes the mental states or conditions of one person to repeat themselves in another. Abnormal conditions of the brain itself furnish another series of feelings with which the brain must deal. Moreover, the brain is charged with impulses to action passed on from generation to generation, surviving because they are useful. With all these arises the necessity for choice as a function of the mind. The mind must neglect or suppress all sensations which it cannot weave into action. The dog sees nothing that does not belong to its little world. The man in search of mushrooms "tramples down oak trees in his walks." To select the sensations that concern us is the basis of the power of attention. The suppression of undesired actions is a function of the will. To find data for choice among the possible motor responses is a function of the intellect. Intellectual persistency is the essence of individual character.

As the conditions of life become more complex, it becomes necessary for action to be more carefully selected. Wisdom is the parent of virtue. Knowing what should be done logically precedes doing it. Good impulses and good intentions do not make action right or safe. In the long run action is tested not by its motives but by its results.

The child when he comes into the world has everything to learn. His nervous system is charged with tendencies to reaction, and impulses to motion, which have their origin in survivals from ancestral experiences. Exact knowledge by which his own actions can be made exact must come through his own experience. The experience of others must be expressed in terms of his own, before it becomes wisdom. Wisdom is knowing what it is best to do next. Virtue is doing it. Doing right becomes a habit if it is pursued long enough. It becomes a "second nature" or a higher heredity. The formation of a higher heredity of wisdom and virtue, of knowing right and doing right is the essence of character-building. The moral character is based on knowing the best, choosing the best, and doing the best. It cannot be built up on imitation. By imitation, suggestion, and conventionality, the masses are formed and controlled. To build up a man is a noble process, demanding materials and methods of a higher order. The function of individual education is to break up the masses. Only the robust man can make history. Others may adorn it, disfigure it, or vulgarize it. The growth of man is the assertion of individuality.

The first relation of the child to external things is expressed in

this: What can I do with it? What is its relation to me? The sensation goes over into thought, the thought into action. Thus the impression of the object is built into the little universe of his mind. The object and the action it implies are closely associated. As more objects are apprehended, more complex relations arise, but the primal condition remains. What can I do with it? Sensation, thought, action, this is the natural sequence of each completed mental process. As volition passes over into action, so does science into art, knowledge into power, wisdom into virtue.

By the study of realities wisdom is built up. In the relations of objects he can touch and move, the child comes to find the limitations of his powers, the laws that govern phenomena and to which his actions must be in obedience. So long as he deals with realities these laws stand in their proper relation. "So simple, so natural, so true," says Agassiz. "This is the charm of dealing with nature herself. She brings us back to absolute truth so often as we wander."

So long as the child is led from one reality to another, never lost in words or in abstractions, so long this natural relation remains. "What can I do with it," is the beginning of wisdom. "What is it to me" is the basis of personal virtues.

So long as a child remains about the home of his boyhood he knows which way is north and which is east. He does not need to orient himself, because in his short trips he never loses his sense of space direction. But let him take a rapid journey in the cars or in the night and he may find himself in strange relations. The sun no longer rises in the east, the sense of reality in direction is gone, and it is a painful effort for him to join the new impressions to the old. The process of orientation is a difficult one, and if facing the sun-rise in the morning were a deed of necessity in his religion, this deed would not be accurately performed.

This homely illustration applies to the child. He is taken from his little world of realities, a world in which the sun rises in the east, the dogs bark, the grasshopper leaps, and the water falls; and the relations of cause and effect appear simple and natural. In these simple relations moral laws become evident. "The burnt child dreads the fire," and this dread shows itself in action. The child learns what to do next, and to some extent does it. By practice in personal responsibility in little things, he can be led to wisdom in large ones. For the power to do great things in the moral world comes from doing the right in small things. It is not often that a man who knows that there is a right does the wrong. Men who do wrong are either ignorant that there is a right, or else they have failed in their orientation and look upon the right as wrong. It is the clinching of good pur-

poses with good actions that makes the man. This is the higher heredity, that is not the gift of father or mother, but is the man's own work on himself. The impression of realities is the basis of sound morals as well as of sound intellect. By adding near things to near, the child tends to grow into wisdom. "Knowledge set in order" is science.

Nature study is the beginning of science. It is the science of the child. To the child training in method of acquiring knowledge is more valuable than knowledge itself. In general throughout life sound methods are more important than sound information. Self-direction is more important than innocence. The fool may be innocent; only the sane and the wise can be virtuous.

It is the function of science to find out the real nature of the universe. Its purpose is to eliminate the personal equation and the human equation in statements of truth. By methods of precision of thought, and instruments of precision in observation, it seeks to make our knowledge of the small, the distant, the invisible, the mysterious, as accurate as our knowledge of the common things men have handled for ages. It seeks to make our knowledge of common things exact and precise, that exactness and precision may be translated into action. The ultimate end of science, as well as its initial impulse, is the regulation of human conduct. To make right action possible and prevalent is the function of science. "The world as it is" is the province of science. In proportion as our actions conform to the conditions of the world as it is, do we find the world beautiful, glorious, divine. The truth of the "world as it is" must be the ultimate inspiration of art, poetry, and religion. The world, as men have agreed to say it is, is quite another matter. The less our children hear of this, the less they will have to unlearn in their future development.

When a child is taken from nature to the schools he is usually brought into an atmosphere of conventionality. Here he is not to do but to imitate; not to see or handle or create, but to remember. He is moreover to remember not his own realities but the written or spoken ideas of others. He is dragged through a wilderness of grammar, with thickets of diacritical marks, into the desert of metaphysics. He is taught to do right not because right action is in the nature of things, the nature of himself and the things about him, but because he will be punished somehow if he does not.

He is brought into a medley of words without ideas. He is taught declensions and conjugations without number, in his own and other tongues. He learns things easily by rote, so his teachers fill him with rote-learning. Hence grammar and language have become stereo-

typed as education without a thought as to whether undigested words may be intellectual poison. And as the good heart depends on the good brain, undigested ideas become moral poison as well.

In such manner the child is bound to lose his orientation as to the forces which surround him in life. If he does not recover it, he will live in a world of mixed fancies and realities. Nonsense will seem half truth, and his appreciation of truth will be vitiated by its lack of clearness of definition, by its close relation to nonsense. That this is no slight defect can be shown in every community. There is no intellectual craze so absurd as not to have a following among the educated men and women. There is no scheme for the renovation of the social order so silly that educated men will not invest their money in it. There is no medical fraud so shameless that educated men will not give it their certificate. There is no nonsense so unscientific that men called educated will not accept it as science. It should be a function of the schools to build up common sense. Folly should be crowded out of the schools. We have built costly lunatic asylums for its accommodation. That our schools are in a degree responsible for current follies, there can be no doubt. We have among us many teachers who have never seen a truth in their lives. There are many who have never felt the impact of an idea. There are many who have lost their own orientation in their youth, and who have never since been able to point out the sunrise to others. It is no extravagance of language to say that diacritical marks lead to the cocaine habit, nor that the ethics of metaphysics points the way to the higher foolishness. There are many links in the chain of decadence, but its finger posts all point downward.

"Three roots bear up dominion, knowledge, will, the third, obedience." This statement which Lowell applies to nations belongs to the individual man as well. It is written in the structure of his brain—knowledge, volition, action, and all three elements must be sound if action is to be safe and effective.

But obedience must be active not passive. The obedience of the lower animals is automatic, and therefore in its limits measurably perfect. Lack of obedience means the extinction of the race. Only the obedient survive, and hence comes about obedience to "sealed orders",—obedience by reflex action in which the will takes little part.

In the early stages of human development the instincts of obedience were dominant. Great among these was the instinct of conventionality by which each man follows the path others have found safe. The church and the state, organizations of the strong, have assumed the direction of the weak. It has often resulted that the wiser this direction the greater the weakness it was called on to control. The

"sealed orders" of human institutions took the place of the automatism of instinct. Against "sealed orders" the individual man has been in constant protest. The "warfare of science" was a part of this long struggle. The Réformation, the revival of learning, the growth of democracy, are all phases of this great conflict. The function of democracy is not good government. If that were all, it would not deserve the efforts spent on it. Better government than any king or congress or democracy has yet given could be obtained through the automatic processes of competitive examinations. By this we could get along with one-half our number of rulers and at one-fourth the present cost. Even an ordinary intelligence office or employment bureau for statesmen would serve us better than we are served by caucus and convention. But not for long. The people who could be ruled in this way would be a people not worth saving. But this is not the point at issue. Government too good, as well as too bad, may have a baneful influence on men. Its character is a secondary matter. The function of self-government is to intensify individual responsibility, to promote abortive attempts at wisdom, through which true wisdom may come at last. Democracy is nature study on a grand scale. The republic is a huge laboratory of civics, a laboratory in which strange experiments are performed, but by which, as in other laboratories, wisdom may arise from experience, and having arisen may work itself out into virtue.

"The oldest and best endowed university in the world," Dr. Parkhurst tells us, "is life itself. Problems tumble easily apart in the field, that refuse to give up their secret in the study or even in the closet. Reality is what educates us, and reality never comes so close to us with all its powers of discipline as when we encounter it in action. In books we find truth in black and white, but in the rush of events we see truth at work. It is only when truth is busy and we are ourselves personally mixed up in its activities, that we learn to know of how much we are capable or win the power by which these capabilities can be made over into effect."

Mr. Jackman has well said: "Children always start with imitation, and very few people ever get beyond it. The true moral act, however, is one performed in accordance with a known law, that is just as natural as the law which determines which way a stone shall fall. The individual becomes moral in the highest sense when he chooses to obey this law by acting in accordance with it."

Conventionality is not morality and may co-exist with vice as well as with virtue; for the obedience which lasts is the product of individual knowledge and will. It is the progressive response to higher and higher laws as the individual comes to recognize them in his own

experience. The welfare of man is not primarily security from deception and evil influences. It goes with the growth of his power to recognize illusions and to base his action on realities. Obedience induced by deception cannot be permanent. Wrong information, it is true, may lead to right action, or falsehood may secure the obedience to a natural law which would otherwise be violated. But in the long run, men and nations pay dearly for every illusion they cherish. For every sick man healed at Denver or Lourdes, ten well men will be made sick. Faith cure and patent medicine feed on the same victims. For every Schlatter who is worshipped as a saint, some equally harmless lunatic will be stoned as a witch. This scientific age is beset by the non-science which its altruism has made safe. The development of the common sense of the people has given security to a vast cloud of follies which would be destroyed in the unchecked competition of life. It is the soundness of our age which has made what we call its decadence possible. It is the undercurrent of science which has given security to human life, a security which obtains for fools as well as for sages.

For protection against all these follies which so soon fall into vices or decay into insanity, we must look to the schools. A sound recognition of cause and effect in human affairs is our best safeguard. The old common sense of the "un-high-schooled man," aided by instruments of precision, and directed by logic, must be carried over into the schools. Clear thinking and clean acting, we believe, is a product of the study of nature. When men have made themselves wise in the wisdom which may be completed in action, they have never failed to make themselves good. When men have become wise with the lore of others, the learning which ends in self and does not spend itself in action, they have become neither virtuous nor happy. "Much study is a weariness of the flesh." Thought without action ends in intense fatigue of soul, the disgust with all the "sorry scheme of things entire," which is the mark of the unwholesome and insane philosophy of pessimism. This philosophy finds its condemnation in the fact that it has never yet been translated into pure and helpful life.

With our children the study of words and abstractions alone may in its degree produce the same results. Nature studies have long been valued as a "means of grace" because they arouse the enthusiasm, the love of work, which belongs to open-eyed youth. The child blasé with the moral precepts and irregular conjugations, turns with delight, to the unrolling of ferns and the songs of birds. There is a moral training in clearness and tangibility. An occult impulse to vice is hidden in all vagueness and in all teachings meant to be heard but not to be understood. Nature is never obscure, never occult, never

esoteric. She must be questioned in earnest, else she will not reply. But to every serious question she returns a serious answer. "Simple, natural, and true," should make the impression of simplicity and truth. Truth and virtue are the opposite sides of the same shield. As leaves pass over into flowers, and flowers into fruit, so are wisdom, virtue and happiness inseparably related.

NATURE STUDY.

BY O. S. WESTCOTT, PRINCIPAL OF NORTH DIVISION HIGH SCHOOL,
CHICAGO.

The moral man and the intellectual man and the physical man constitute indeed the same man. Psychologists and intellectual philosophers, from time immemorial, have found it impossible to stay upon the ground supposedly their own, as witness the paper of President Jordan we have just heard, without constantly trenching upon the premises, each of the other. In our modern treatment of the physical basis of life, of the developing convolutions of the brain, of the functions of the gray matter of the same, we find ourselves, with marvelous frequency, crossing and recrossing the bridge, that once seemed over a far wider stretch, to connect the intellectual with the physical man. Even with the broadest preparation, then, it is evident that it would be extremely difficult to treat of men as a triple-entity, but rather as a unit. That, as we were told last evening, the brain matures many years after the cranium has attained its full dimensions, is only another indication of the same difficulty. The old adage of the pedagogues, "Non multa sed multum," is in nature study more honored in the breach than in the observance. Indeed, a new phraseology, "Non multum sed multa," is sure to become the motto of the devotee of biological science. When two-score and more years ago many of us were contending with the tasks set us in school, nothing was deemed of greater difficulty than the deciphering and interpreting of some of the choruses in the old Greek tragedies. And yet, I undertake to say that, if difficulties surmounted are at all indicative of intellectual strength gained, the mere identification of strangers in zoölogical science by the discrimination of characters on which this identification depends is often a more perplexing task than anything we met in the Greek tragedians. When we reflect that in the maturity of manhood we find ourselves, in nature study, confronting tasks so difficult, and remember that in our callow youth the other tasks indeed were not insurmountable, the comparison is rendered still stronger. The moral

quality which we designate truthfulness is also, in its exercise, an intellectual gratification, preceded, as it must be, by careful and accurate observation, supplemented by scientific deduction.

To illustrate: When the Mormons were driven from Nauvoo, Ill., many years ago, it happened that at about that time there was almost a plague of a certain neuropterous insect, which, in its early stages, lived in the Mississippi river. This insect, appearing in countless numbers at this time, was dubbed by the people "the mormon fly," and, in some localities, it has retained the name ever since. This insect is also abundant in Lake Erie, and in many of our northern fresh waters. Coming from Niagara Falls last Tuesday, I found one on the window of the car on which I rode, and, presenting it to a friend, asked him to examine its mouth. Though I furnished him with a good Bausch and Lomb achromatic triplet, he was unable to locate its mouth. I submitted it to several others of my acquaintance on the car, but usually with no result. As I anticipated, however, one searcher alleged that he had discovered it. The truth was that the insect had no mouth, and that the last gentleman was deceived by or easily imposed upon by his vision. This result is not uncommon, especially with adults whose powers of observation have not been skillfully developed. Now here is a burning curiosity excited to know why this particular insect should be unprovided with mouth, or masticatory apparatus. The fair inference that its life is of necessity brief is in the line of a cultivation of the reasoning faculty, and if the tyro assumes the insect to belong to the family of Ephemeridæ, he will not be very far from wrong, as the Phrydaneidæ to which family the insect belongs are near neighbors of the Ephemerids.

The imagination is surely susceptible of cultivation in thinking of this curious denizen of nature's vast storehouse. The memory is exercised in recalling its form, particularly its face, and other characteristics, and finally the man is sure to be spurred by the determining will to make researches in similar directions, with a view to new discoveries.

With the young there is no more stimulating study than that of nature. It is *per se* attractive, and with an informed and enthusiastic teacher, the influence of the study is beyond comparison. There is no question in my mind but that the attendance in one high school in the city of Chicago for the past two years has been vastly better by reason of the interest excited and maintained in a sensible and attractive method of teaching the subjects of zoölogy and botany. Such study is illimitable. It remains with the student during life. Its attractions are irresistible. Send a pupil from school with his eyes opened to the beauty of the natural world, in any department, and

they are never thereafter closed. Teach him the use of the compound microscope, and it is always at the service of his intellect and his soul. In what better field, pray, may the fifty-four thousand of whom we heard last evening be educated and developed and expanded in intellect and heart and soul, than in the limitless field of nature? Here, surely, may the five points of Bishop Vincent's ambition be beautifully developed. Here in observation are surely the desired "beginnings of education." Here is his "capacity for acquisition" constantly enlarged. Here his "insatiate desire" must, of necessity, follow. The resulting "wisdom in application" can hardly fail to be realized, and the "well-balanced character" follows as surely as the day the night. Witness Thoreau, Bryant, Agassiz, John Burroughs, and a host of others, ancient and modern, whose characters have been formed through nature by nature's God.

THE FUNCTION OF NATURE IN ELEMENTARY EDUCATION.

BY M. G. BRUMBAUGH, PRESIDENT OF JUNIATA COLLEGE, HUNTINGDON, PA.

The gift of the Renaissance was a new content in the curriculum of existing schools. It was the gift of humanism as opposed to dogma and scholasticism. But humanism was a half-truth in the educational world. Bacon and Comenius gave fullness to our concept of educational matter by demanding a place for the investigation of objective nature. Realism became the rival of humanism; and the war of the centuries since has been waged for supremacy of the one as opposed to the other.

Assuming that nature has a content of sufficient value to make it worthy a place in the curriculum of the elementary schools, it is the purpose of this discussion to indicate how this content may be most happily utilized by the teacher for the child, and by the child for himself.

The spirit of Spencer and Rousseau had given to education in the decade between 1870 and 1880 a distinctly scientific trend. Nature was to be studied, but only in formulæ. The objective world was to find report through classification. The investigation of things was to be made by the scientist for the child, but not by the child for itself. The text-book was to be learned, but the sermons of science, much less those of nature, were never heard by the child.

A teacher talked to the child; and the singing stream, the chatting crow, the murmuring pines, the articulate silences, were commanded to

be still. Children consumed precious time committing senseless formulæ about things, and nature was parsed and analyzed as logically as a sentence from Cæsar or Homer. The child in school sat at a dinner of husks, yearning for the ripe kernels of truth that had feasted his hungry soul and satisfied it before he had been transformed from a ranger at will to a bondman without will.

This craze for classified knowledge and formulæ has run its day, and the lingering influence of its riotous career may still be seen in the over-systematic presentation of almost all sorts of knowledge—in the so-called topical method of teaching, by which the child learns outlines without any corresponding content; in the divisions and subdivisions, headings and subheadings, sequels and far-fetched moral applications of all forms of knowledge as presented in the text-books for children, and in the overwrought classification and mathematically exact gradations in our systems of schools.

Today one hears little of this systematic craze, and too little against it. Object lessons have given way to "nature study," and the new term is coming more and more to stand for an appreciative contemplation of nature, and less and less for a critical analysis of technical terms. We are changing from a scientific to an artistic study of nature; and the transition marks an epoch in our educational progress greater than one might suppose. It indicates a feeling of unrest and a desire for new lines of approach to what must necessarily be, for all time to come, a content of the greatest moment to our educational work.

What is nature's message to the child? Have we interpreted this message? Thomas Wentworth Higginson, with something of inspiration, has, it seems to me, touched the heart of the matter from the literary side. "Under the present educational system we need grammars and languages far less than a more thorough outdoor experience. Flowery banks and ripple-marked shores are the true literary models. A finely organized sentence should throb and palpitate like the most delicate vibrations of the summer air. Tried by the outdoor standards, there is as yet no literature, but only glimpses and guideboards; no writer has yet succeeded in sustaining through more than some single occasional sentence that fresh and perfect charm." "Let us interrogate the great apparition that shines so peacefully around us. Let us inquire to what end is nature." Thus writes Emerson, and in answer to his own question he points out her fourfold function:

1. Her commodity value.
2. Her beauty value.
3. Her language value.
4. Her discipline value.

Nature's commodity value—her value to the physical man—is "the quality that appeals to nations in their childhood, to men in their crudity, and forms the subject of the lower phases of physical science." It is the study of nature in the spirit of gain. It is the debasement of nature to a mere dollar-and-cent basis. The child from this point of view is taught to regard the objective world as representative potentially of a vast amount of wealth, and he is led to feel that his highest service to the race and himself is performed by changing this possible wealth to actual wealth. Nature becomes the object of study in a purely selfish way, and value attaches to things in proportion to their ratings in financial exchanges. The child unconsciously opens a stock exchange, and deals in objective things as a broker does in stocks. The market is "bullied" or "beared" and the values fluctuate as his interests fluctuate. Nature comes to have no fixed value. To enhance her value nature is formulated, catalogued, classified, and systematized after all sorts of schemes; and the command, "subdue the earth," is made to read, "subdue the earth for gain."

We shall, of course, never be able to rid the world of this attitude. The modern scientific spirit lays yearly greater stress upon it. Our civilization renders this aspect of nature paramount. The public school has two vital truths to keep in mind in dealing with this characterization of nature.

1. Children at an early age are utterly unable to interpret this lesson fairly. If persisted in, it must result in false impressions, in entire misunderstanding of the relation of the self to its environment. The young child cannot adequately grasp the message of science. Herbert Spencer, the chiefest of sinners along this line, admits that the ornamental precedes in point of time the useful, both in the race and in the individual. Unfortunately the utility value is frequently the only value the child is ever asked to regard.

2. The out-of-school and after-school influences all emphasize this aspect of nature and render unnecessary the great emphasis too often placed upon it in the curriculum. The public school has a perfect right, has indeed the obligation, to take into account this tendency, and where great stress is laid by influences at work out of school, the teacher can well afford to place less stress than where such influences are not at work. The public school, it seems to me, should face problems broadly, and read its mission in the principles of the profession it fosters, rather than in the narrower demands of the money-mad clamor of an inconsiderate populace.

I do not undervalue the practical side of an education; I do not decry the study of science in our schools; I simply protest against

narrowing the outlook of childhood to a single aspect of nature, and thereby putting a false bias upon his career.

The giant oak and the graceful elm may represent potentially so many feet of lumber and so many cords of wood; the waving gold of the summer grain may stir no emotion save that of physical content; the mountain stream wooed from its moss-mantled couch, moving in showers of silver and clothed with rainbows, may excite no response in the youthful beholder; but it ought not to be so. The public school has traduced its high mission if it is so. The report of the Committee of Fifteen recognizes this tendency in elementary education, and properly raises protest in the following statement: "A child overtrained to analyze and classify shades of color—examples of this one finds occasionally in a primary school whose specialty is 'objective teaching—might in later life visit an art gallery and make an inventory of colors without getting even a glimpse of the painting as a work of art. A parallel to this would be the mason's habit of noticing only the brick and mortar, or the stone and cement, in his inspection of the architecture, say, of Sir Christopher Wren." A further parallel was noted at the World's Fair. Two women came suddenly upon that matchless painting, the work of a late and lamented Pennsylvania genius, called "Breaking Home Ties." After consulting their catalogue, and ascertaining its name and author, they examined the painting critically and one remarked to the other, "Well, what old-fashioned wall paper." To their critical but soulless gaze, one is led to apply the truth of Wordsworth, "A primrose by the river's brim, a yellow primrose was to him—and it was nothing more."

The beauty value in nature seems to me to be too much neglected in our elementary schools. "Our American life," says an eminent follower of Thoreau, "still needs, beyond all things else, the more habitual cultivation of outdoor habits." These habits, instead of interfering with the real work in science, will give the very basis essential to good scientific work. For the formulated study of things in the high and normal school every rational mind must plead. *But the basis for this, laid broad and deep in the early life of the child, is artistic, not scientific.* The eye that is informed and re-enforced by a sympathetic heart is better prepared for true investigation than the eye that moves in obedience to a cold and calculating intellect. Professor Laurie well says, "All thinkers will now admit that up to the age of puberty, at least, subjects which appeal to the senses and connect a boy with external nature, ought to take precedence of all others except the vernacular language and arithmetic." But Professor Laurie stops at the parting of the way between humanism and sense-realism. He says an "undisputed thing in such a solemn way."

The real point at issue is deeper. How shall the boy be connected with external nature? My contention is that the first touch should be sympathetic, not systematic; that the child loves to classify only where he first loves; that the artistic basis is the best preparation for real scientific work.

John James Audubon had his boyhood home in a cave on the banks of the Perkiomen creek, in Montgomery county, Pa. It was here that his soul was filled with rapturous love for bird life. It was this love that led him for a quarter of a century into the secret haunts of humming bird and oriole. First an artist, then a scientist. It was self-directed research after his own plan, investigation prompted of love, that made possible the growth of the first ornithologist of America, perhaps of the world. And this is typical of the process in each life. It is a great moment in a boy's life when he first meets in the world of things the object for which his soul yearned—when he finds the things he loves and the things that link him lovingly to the great world without. A pupil of mine, dull and listless in his work for a year, was finally persuaded by his teacher to study botany. He did his text-book work in an indifferent and listless manner. Early in June, on a rainy afternoon, he accompanied his class to a private haunt of the orchid family. Here the boy unexpectedly found a rare specimen, and, throwing himself upon the wet ground beside the beautiful flower, wept for joy, and between his sobs called alternately to his teacher and to his God in his moment of supreme exaltation. That boy found the thing he loved. He loved all its associates, and became one of the best botanists Juniata college ever produced.

It seems to me of vital importance that each child should early in life be given the opportunity to form intimate, sympathetic associations with some object of nature. It is not so important to determine for him what that object shall be or what the manner of the association, as that some association be formed. Allow his own taste to select and his own emotions to direct his nature companionships. The boy that has never been led to be on speaking terms with some objective thing has not taken the first lesson in real educational progress.

I know how difficult it may seem to the city teacher to accept this proposition as a practical one. But I assure you that it is eminently practical. Within convenient reach of every schoolroom and home in the city are priceless associations for every child. In the words of another, every child may be led to assert his own experience: "Who could be before me, though the palace of Cæsar crack and split with emperors, while I, sitting in silence on a cliff of Rhodes, watched the sun as he swung his golden censer athwart the heavens?" Born

within sight of miles of silence, still waters, and green shores, it is fatal to all great advance to shut this vision from the life of any child.

Every pupil should seek out and appropriate to himself some secret retreat, all his own, where in the midst of loveliness he may lie down and enjoy. Is not, after all, the secret of the country child's greater resources in the exigencies of life to be found in the fact that such an association has been formed? The city school affords superior training. The country school in many cases produces a superior product. The companionship of free air and wide vista has developed a largeness of soul so marked that Mary Lamb reports Wordsworth as holding it "doubtful whether a dweller in town had a soul to be saved." The city school can do for the young child the highest service by aiding as far as possible in creating in each young life a special fondness for nature. The splendid work being done now in many high schools and training schools is a just recognition of the lack of this work heretofore, and of the value of it to the teacher who goes into the elementary schools to quicken a like fondness in each child. The success of this work is conditioned only by the intensity of the love in the pupil-teacher's heart as she approaches, in the crowning years of her training, the true formulation after scientific models of that which her soul sincerely loved from childhood. It is a wonderful experience in the child life to plant a single seed, study its germination, its growth, its bud, its leaf, its flower, its fruit,—to see in this single growth a type of the season when "frosts are slain and flowers begotten,"

" And in green underwood and cover
Blissom by blossom the spring begins.
The full stream feeds on flower of rushes,
Ripe grasses trammel a traveling foot,
The faint fresh flame of the young year flushes
From leaf to flower and flower to fruit:
And fruit and leaf are as gold and fire,
And the oat is heard above the lyre,
And the hooped heel of a satyr crushes
The chestnut-husk at the chestnut-root."

Let educators recognize this artistic basis for true scientific work, and boards of control will unite with teachers and superintendents in granting the teacher the right to take, not a holiday, but a holy-day of enthusiastic and genuine educational research out under the spreading trees, along our beautiful streams, among the companionship of flowers and birds, beyond the valleys that laugh as they are covered with the gold of God, and where the shouts of His happy multitudes ring around the waterfalls.

No child is sincerely fitted to pursue systematic study who has not

felt a homesickness for field and forest. I count among the best experiences of my life days spent in one of the numerous nooks among the mountain fastnesses of our own grand state, where, in years agone,

Wild roved an Indian girl,
Bright Alfarata,
Where sweep the waters of
The blue Juniata.

Here I have seen the morning sun crown the tallest pine on the mountain's crest with a wreath of gold. The bird choir led the triumphal march from tree to tree, until the valley, flooded with light, hung out its leafy banners to herald the approach of day. I have seen the morning mists, purple with the tinge of vine and leaf, creep sullenly to the shadowy recesses of the spirit-haunted hills. I have seen these same shadows at eventide leap from their lair and drive the lingering light of an autumn day up the eastern slopes and hold the valley enthralled in a double darkness of night and shadow. Wandering along a mountain stream that leaps from the open sky into twilight pools, one may hear in its murmurs all the songs of human life. It sings of the meadows beyond, where a fortnight ago it slept between fern-fringed banks and dreamed of stars. Again it sings in plaintive notes a song that has in it all the remembrance of the lullaby that, half in sorrow, half in hope, leaped from my mother's lips and made my young soul yearn for the sorrowless song of heaven. When fretted by the mountain storm it will roar a hoarse response to the crashing thunder, and defy the lightning's flash. Along its narrow channel will be found rock barriers that forbid one's onward progress. But woo them, and they too will reveal to you, through green-curtained portals, secret haunts of rare flowers and rarer birds. Here the rhododendron veils the jagged rocks, and mantling mosses put their fingers upon the sorrowing stream that just beyond leaped from the sunlight, with a rainbow in its bosom, and woo it into silence. There is no voice here. The insect whisperings are stilled. The soul is in nature's holiday haunt. Here one imbibes the spirit of rest and breathes the air that nature meant only for her own. A day in such a labyrinth of varied beauty—and such scenes are within the reach of almost every child—will enhance a thousandfold the value of all subsequent study.

A child should be encouraged to love a tree. I recall now a grand old maple that lifts its perfect cone of green from the plains of Ohio. It is to me an object of almost human interest. Its photograph stands on my desk side by side with that of other benefactors among the teachers of my life. There is, on the campus of the grand old University of Louisiana, at Baton Rouge, a mammoth live oak, whose

perpetual crown of green has for a century been an object of instruction and of inspiration. It is today one of the most honored members of the faculty of that institution.

Nature has a third value in education, namely her symbolic or language value—"the revelation through type and symbol of an eternal spirit, beheld shining through the veil of outward form by the mystic of all ages, from Plato to Carlyle." There are dreamy children in almost every school whose life light is burning low from the lack of opportunity to exercise this vision. The scientific appeal and the artistic appeal will not touch every child. The teacher must be conversant with this aspect of nature to awaken slumbering possibilities in some of the rarest minds of the schoolroom. This is the avenue through which to reach the sensitive and reflective spirit. It is the expression of the artistic impulse on the poetic as opposed to the scientific side. One finds here, in nature's symbolisms, the influence that defies classification, and ministers, through suggestion and analogy, to what we are accustomed to call the unusual and the unnatural child. I have known children to whom the objective things were mere types. They found the realities in nature's suggestions and were delighted, in a quiet way, with occasional revelations of the things they sought. In this aspect of nature one finds the real inspiration of the poet. It led Bryant to feel that

To him who in the love of nature, holds
Communion with her visible forms, she speaks
A various language.

It was under this revelation that Shakespeare found

Tongues in trees, books in running brooks,
Sermons in stones, and good in everything.

Wordsworth felt this spell and sang,

Heaven lies about us in our infancy!
Shades of the prison-house begin to close
Upon the growing boy;
But he beholds the light, and whence it flows,
He sees it in his joy;
The youth who daily from the East
Must travel, still is Nature's priest,
And by the vision splendid
Is on his way attended;
At length the man perceives it die away,
And fade into the light of common day.

With which one should compare the following lines on childhood from Vaughn's "Retreat:"

When on some gilded cloud or flower
My gazing soul would dwell an hour,
And in those weaker glories spy
Some shadows of eternity,
Oh, how I long to travel back,
And tread again that ancient track,
From whence the enlightened spirit sees
That shady city of palm trees!
But ah! my soul with too much stay,
Is drunk, and staggers in the way.

Here, too, Byron, the restless, found peace "in mingling with the universe"—

To feel what I can ne'er express,
Yet cannot all conceal.

And Coleridge, in the presence of the snow-crested Alps, exclaims:

I gazed upon thee
Till thou, still present to the bodily sense,
Didst vanish from my thoughts entranced in prayer
I worshipped the Invisible alone.

I have quoted thus at length to give emphasis and meaning to an aspect of nature study that too few teachers recognize the value and significance of, when it possesses the child spirit. Still fewer teachers, I fear, regard such tendencies in the child as of any special worth. Indeed, it seems just to assert that any such yearnings are promptly suppressed, and the student is cautioned and admonished to pay attention to the more practical things of life.

Nature's fourth value—her discipline. "The functions of nature as the great teacher, who, through the sternness of multiform law, the tenderness of multiform suggestion, molds her child, æon after æon, into the likeness of a perfect man," is rarely recognized as of any special utility in the child life. While it does not seem reasonable to substitute the rigid economy of nature for the equally rigid, but more purposeful and reasonably adjustable discipline of a trained human spirit, still nature does, in many of her aspects, give point and suggestion to the discipline of the growing child. He learns from her that the best things are most difficult to obtain, and is thereby encouraged and incited to greater perseverance in the trying moments of his advance. He learns, too, that processes unfold in sequence, and that great success at any point of advance is achieved only by carrying with him every fact and principle gathered in his earlier efforts. Thus his knowledge becomes not only clear, but also distinct; by which one is to understand that he is to master facts in a two-fold manner. He is not only to see the given principle, truth, or fact, as distinct from others, but he is to see it in its relations. Thus he prepares

- himself by clear knowledge to advance to correlated knowledge. He learns, moreover, that *values* in education are to be measured by intensity, not by extensity; that *power* results from seeing in a given compass what has heretofore escaped discovery; that *efficiency* results from seeing newer and deeper relations in old lines of inquiry, rather than in endeavoring to create a craze by proclaiming a new sort of content for educational research; and that *quasi-meaning* to a large number of concepts is infinitely inferior in every respect to richness and depth of meaning to a limited number of terms.

The function of nature is, therefore, fourfold; and gives suggestion, method and material for molding predisposed childhood into the scientist, the artist, the mystic, or the sage. For one of these messages every normal child is specially fitted. To compel him to follow one of these lines when his entire life trends along a different one results too often in stupidity and enervation. Here, then, is the secret of true specialization. The child should be lead in his investigations along what is to him, not to the teacher, the line of least resistance. Regarding this as a center in his educational increase, he will naturally and readily widen his area of inquiry and eventually comprehend nature in her fullness. It will be a comprehension centered in love and in interest, and will give the child an organized and systematized outlook upon the entire field of objective facts from his self-selected centre; thus his mind will compass the same range of truth as his fellows, but it will be a distinct and individualized outlook. His personality will be recognized. His knowledge will be unique. His interest will be self-maintained. His place in the social relation will be enriched. His usefulness will be enhanced, and, what is of vital moment to him, he will come to realize more and more as his life sweeps onward to its culmination, that he has focused the realm of his knowable truths upon his own field of inquiry; he was born for a purpose. Education aided him to realize that purpose. He has learned that a man is not a complete man until he is an educated man.

The system of public education will merit and receive his life-long support and respect, and the character of his education will set at rest, forever, the widespread discontent with existing methods in our schools. The schools can win by their own process their entire independence.

There follows, therefore, certain truths which the teacher must come to accept and follow in the work of the schoolroom:

1. That every child can be reached and enthused: that, as Mr. Payne says, "every child can be educated into the consciousness of power accompanied by the consciousness of pleasure."

2. That there is a line of approach to each mind along which the labor of education is reduced to a minimum.

3. That a teacher by the study of a child's native endowments should be conversant with all these lines of approach; that, in short, the teacher must have realized in his own experience and training vastly more than any one child can attain in the school; and that he cannot give to the child clear and distinct knowledge unless his own knowledge has in it at least the additional element which, for want of a better characterization, I must call the element of *adequacy*, which is understood to mean analytics beyond the analytic power of the immature mind, and which results in what may be regarded as "reserve force" in the teacher's equipment.

4. That the child unreachd and unenthused is a living witness to the inefficiency and lack of breadth in the scope of the school work.

5. That by far the largest number of children are touched by the first, or commodity, value of nature, and that, therefore, science must be a prominent, if not the most prominent, element in the curriculum.

6. That the life career of the average child emphasizes this aspect of the study of nature on the practical side.

7. That science will achieve its most perfect results where an artistic and appreciative preliminary training is given, and consequently that formal scientific work should begin in the high school and the normal school.

8. That biological study, including laboratory work and personal investigation of objects in their natural environments, is the connecting link between the concrete and unformulated nature study in the elementary schools and the formulæ and generalizations of the higher grades, including the college and the university.

9. And, finally, that scientific training shall be paralleled in the secondary schools by a careful and critical study and construction of language based upon nature's models, to the end that the child's life may be linked with his natural environment broadly and richly—that humanism may rest in nature lore for its models.

Nature will thus be given her true setting among the other elements of the content in our educational processes, and the child will grow into a living realization of the legend,

"In the midst of the light is the beautiful,
In the midst of the beautiful is the good,
In the midst of the good is God, the eternal One."

DISCUSSION.

L. D. HARVEY, President of the State Normal School, Milwaukee, Wis.—I shall confine myself to a few statements made in the paper prepared by Dr. Jordan. He tells us there that action is the essence of "character-building." Is that true? I challenge that proposition. If action is the essence of character-building, then the action of the tadpole could result in character-building. There must be something more than action to develop character. There must be something more than that to develop moral power. If I were to coin a phrase, I should say that the essence of character-building is in motive which finds expression in action. The keynote of the whole paper as I see it is summed up in the single sentence, "The purpose of science is to eliminate the personal equation and the human equation in the statement of truth." Is that the purpose of science? If it be the purpose of science, then let it occupy its field, but let us not forget that the human equation is here not to be eliminated but to be solved. The presence of this magnificent concourse today, gathered from the whole territory of the United States, is a protest against the elimination of the human equation in the statement of truth. Let us have that equation solved. I believe that there is in the field of science ample scope for the consideration of the human equation, and just to the extent to which it is eliminated, to that extent is science's teaching limited in its influence and force on moral power.

He tells us again that the individual who knows the right is not likely to do the wrong. The poet has said:

"We know the right and we approve it too,
Condemn the wrong and still the wrong pursue."

That is poetry. Possibly the other is science; you may take your choice. But I beg of you to remember this, and appeal neither to scientist nor to poet except as you appeal to the one or the other in your own personality, and answer me the question, whether your doing is on a par with your knowing.

Again, there is another statement which I am not quite clear upon: "Knowing a thing well is a powerful impulse to virtue." I would concede that, but I think it equally true that knowing a thing well is a powerful impulse to vice. If you challenge my proposition, appeal to your own experiences; appeal to your own observation. If I know well how to copy the handwriting of another man and am in a position where the doing of that will furnish an opportunity to accumulate wealth without further effort, is the knowing of that thing well an impulse to virtuous action? If I possess the knowledge which enables me to pick a lock, is that an impulse to virtuous action? No, my friends, the impulse to virtuous action is not in the mere intellectual power of knowing; there is something more than that. Mark you, I am in hearty accord with very much that is in the paper. I believe most emphatically in knowing things well and in knowing why we know them well. I am not opposing that proposition, but I am opposing the proposition that that means virtue.

He tells us again that morality, or moral power, results from action; not from imitation; not from suggestion. I put against him the Great Teacher who on the shores of Galilee was the first one to pronounce that statement which was a command to imitation, in his "Follow me." That statement which has come on down through the centuries, that example, that life, that action of

his influencing men's motives, and through their motives their actions, has done much for the world, aye, even more than has the study of nature. It may be true that the study of the frog, or the study of the wonderful processes by which the male spider makes himself attractive to the females of his society, may be of more value than what is known of Joan of Arc or of some other ancient character, but is there not a little implication there that the alternative lies between the Joan of Arc and the other. I submit this is not a necessary alternative. I submit, if we can not have the frog that we can have something more in the field of human interests than even Joan of Arc.

I am in hearty sympathy with him when he speaks so feelingly of diacritical marking. I have been there. I have recovered from the habit. I have discovered that it is possible to have a considerable content in a scheme of education, outside the field of science, even if diacritical marking be left out.

I want to suggest just this, that there is a very practical question which concerns us as teachers in the consideration of this subject of nature study. It is that the best thing to do at any time is the thing which can be done. Not the thing you would like to do and can't do, and try to do and fail to do; but the thing you can do, that is the thing to do. Now, when we undertake this business of nature study, when, as Dr. Coulter would have told you had he been here, that nature study means the elimination of text-books and the study of things only, we come to a proposition that what is needed in nature study is teachers with enthusiasm like Dr. Jordan and Dr. Coulter and these other men who have made science their life work. We can't get them for \$40 a month. That is the proposition that confronts you, a plain, practical business proposition and I submit that as a question for your determination. The nature study which has been done,—I am not mistaken here,—the nature study which has been undertaken and carried on throughout this country is practically a failure, in every large city and every small one where it has been attempted. There may be exceptions, but I think the results will bear out the statement and will show that the mental as well as the moral training is far inferior to what is claimed for it; that there is the same mental quality involved in dealing with some other things that may be involved in dealing with science. That we find the child interested in the works, conditions, and relations of men, and that in their study as high an order of intellectual activity is involved and more effective incentives to moral action found than in the field of nature study.

The question is then, in view of the fact that nature study cannot be carried on successfully, and I think it cannot be controverted that it has not been done up to the present time, except in those rare instances where thoroughly trained and enthusiastic teachers are presenting it, shall we attempt to push it into the schools before we are ready for it? Or shall we give further attention to training our teachers so that we may have teachers who shall do it not only with enthusiasm but with intelligence, intelligence not only as to method but as to matter as well.

PROF. J. N. WILKINSON, State Normal School, Emporia, Kansas.—My interest lies chiefly in the subjects discussed by President Harvey, of Wisconsin. So much has been claimed for nature study that its advocates are in danger of giving the impression that they would exclude everything else from the schools. It goes without saying that we who object to some of Dr. Jordan's extreme statements, have nevertheless no disposition to disparage nature study so far as its true value has been presented. We fear, however, that nature study is not sufficient for our salvation. I am not ready to concede that we have not done a great deal

of nature study in the rural districts. We have had more of nature study than of anything else, but not exactly according to the canons of the universities. I will not assume, however, to say that we of the rural districts, we of the West, who are in contact with nature so much, will arrogate to ourselves on that account any very great superiority in moral culture. However close we get to the truths of nature as exemplified in the world of rocks and flowers and birds, human life and actions will always retain their power of inspiring men whether young or old to attain greater moral excellence.

To declare that what is of moral value in literature and history is nature study is a begging of the question that is raised in regard to these subjects. The nature-study method of seeking truth is very far-reaching, but there are many truths beyond the field of nature study proper. We are told that if history is to be of any value we must study original documents. I am not sure that I see the force of that remark. I am not ready to concede that the nature study about the race as highly developed animals has greater moral value than the study of the history of its thoughts and deeds. We have some interesting records of nature study. In ancient times when astrology was the chief subject of study—and it occurs to me that the history of that study has done more for the race than the study itself has done—there was no phenomenal manifestation of moral power. What history has done to record the mistakes of nature study must in itself be a great moral influence. We have had many educational delusions, and nature study itself has at times given wrong impressions. The nature study people base more of their belief on hypotheses, on plausible guesses, if you please, than do the students of recorded history. Now, it occurs to me that the history of moral phenomena through the whole experience of the human race is full of many valuable lessons for us. It is conceded that human experience, the inspiration that comes from human life, may be in its aspects as nature study, of great value, and may give a certain moral power. But I submit to you teachers who are, in all the schoolrooms over this country, doing something in imparting moral power, the question whether the influence which goes from you to the child to build him up in moral strength, is best exercised through the methods of nature study.

No, the mysterious influence of nature study is not the secret. Rather is it not the case that there is an inspiration in human character which appeals from heart to heart and does not go by the methods of systematic analysis or the processes of vivisection?

We are told of the very great moral power that is to come from dissecting the frogs. I maintain that whatever of moral power comes from work of this kind comes from the spirit of the teacher and the student. I maintain that the dissecting-room, that the laboratory, that vivisection, for instance, before a class of pupils in the school may, unless discreetly managed, be a means of moral degradation, a means of stultifying the nobler feelings and impulses, a means of lowering rather than elevating the moral sentiments of the child. I suppose that of all the parts of the human race with which we are conversant, the savage, perhaps, is the best example of the specialist in nature study, and yet it occurs to me that the savage, who is developed solely by his contact with nature, who gets no sort of inspiration or guidance from history or literature, is by no means the best example of moral power. Every one of his numerous medicine men holds a sway more complete than does an occasional such man as Schlatter the healer.

If nature study is to be the chief means of moral culture, then the child is to be excluded from the benefit of the vicarious experiences of his ancestors. If we accept the claims of the paper under discussion we must rank art and sculpture and

music as forms of nature study. Surely nature study should not claim all the influences that build up strong moral character.

The closing thoughts of the paper are that knowledge and will are the things that make moral power; but I take issue with the statement that nature study is the best means of strengthening the will. It seems to me, fellow teachers, that while nature study as a mental training, while nature study as a means of enthusiasm, while nature study as a means of fixing processes and discovering the truth, is to be encouraged by us, is to be used by us in our schools, we must, nevertheless, recognize that above and beyond these things are the elements of personal influence, the incentive of interest in a personality which, notwithstanding all that may be said about hypnotic suggestion, shall, nevertheless, be a power for moral strength throughout all the growth and history of the race.

MRS. EVA D. KELLOGG, Editor of Primary Education, Chicago.—The function of nature study in the culture and rejuvenation of the teacher of little children—let us consider that a few minutes.

As the teacher, so is the quality of nature study in our elementary schools. As she absorbs, grows finer, tenderer, truer, more sympathetic and sunshiny under the influence of nature study and contemplation, so will the schools reflect fineness, tenderness, truth, and sunniness under her influence as the transparent, dancing sheet of water catches the shifting sky-tints above it.

Show me a school that takes up the period for nature study with an air of indifferent matter-of-factness and it needs no clairvoyant vision to see the teacher of that school preparing for that lesson. Microscope and Gray's Botany, opened at the fine print pages, before her; pencilings of statistics on her note pages; a scholarly scowl, indicative of determined, conscientious research; earnest eyes that look out mechanically upon a scientific world made up of plant families, correctly classified.

Another schoolroom! See these faces brighten as the hour for nature study draws near. Notice that indiscribable something about these children that betokens "a good time coming." And their teacher? She is not ignorant of the technique of her work—O, no! but her inspiration for this hour is drawn from the humble "flower in the crannied wall." And the spirit with which she brings this to her classroom finds its best interpretation in the immortal lines:

"If I could understand—little flower—
What you are, root and all and all in all,
I should know what God and man is."

To which teacher will nature study be a means of culture and refreshment and to which class of children will it bring the truest good?

It is a matter of congratulation that there is one subject in our public schools for which the best preparation is found in "green pastures and beside still waters." The very nature of the subject demands the laying aside of wearisome routine and the going forth free and unfettered to find nature's ways of doing things. And it is marvellous how the discovery of every secret of her wondrous handiwork brings to the seeker a healthful buoyancy of spirit and how each taste of beauty from tinnest flower-cup is a draught for the slacking of soul-thirst! Such study and investigation means culture and refreshment for the teacher, but it can only be obtained when she is permitted to teach nature in the true way—a way that does not admit of an examination for tangible results. When we can formulate the method by which a little vine clambers and twines its tendrils into

festoons of infinite grace and loveliness; when we can estimate the amount of brightness and beauty which sunlight and moisture have brought to plant life in a single day; when we can count the notes in one joyous bird-thrill—then it will be time enough to require our children to give back to us in words and figures that which they have absorbed from nature study.

Do we remember when nature study was first introduced into our schools how much we hoped from it, how much we dared to anticipate for its influence upon the entire school curriculum? But the power of habit was too strong. So long had we tabulated education and gauged its progress by statistics that, before we at all realized it, nature study itself had fallen into the clutch of materialism, and Shylock was demanding his "pound of flesh." Submissively we yielded. Mechanically we fell into line. We began counting stamens and petals, measuring the diameter of flower stems, giving a mathematical twist to tiny twigs to bend them to purposes of correlation, finding the per cent of rose buds, the ratio of average terminal growths, and the nice proportions of rainbow tints on a butterfly's wing.

Let us away with all this attempt to materialize the spiritual in nature study. Let us have one thing in our schools that stands for simple beauty, its "own excuse for being,"—one thing that cannot be analyzed, diagrammed, memorized, added, subtracted, multiplied, divided, partitioned, or measured; but is as free as the air and as beneficent as the sunlight of heaven. If we ever rise to the height of confidence in our teachers to say to them, "Teach beauty," what soul-expansion will result. Beauty and ethics, remember, are one and inseparable. The good, the true, and the beautiful! A trinity forever.

We bring art into our schoolrooms and decorate our school walls. We do well. But let us remember that the sense of beauty must first be cultivated, and restored to our children as a lost birthright before art can open to them her treasures. It will be useless to point out the human sentiment and sympathy in Landseer's masterpieces till they have learned to recognize that look in animal life about them; or to call their attention to the tranquil pensiveness of a Corot, or the wondrous sky and charming foliage of a Claude Lorraine, till they have learned to see the beauty of real foliage, and to feel the mystic charm of the sky above them. Neither can we expect them to see ought of the rich, dreamy beauty of Gothic architecture till they have come to look up with reverent admiration to the crowning arch of the interlacing tree-tops over their heads.

"Art," says Ruskin, "goes to the cataract for its iris; asks of the sea its intensest azure, and of the sky its clearest gold." When our children shall learn to see the iris in the cataract, the azure in the sea, and the gold in the sky, then, and only then, will their eyes be opened, and their hearts be made ready to comprehend the highest significance of nature study.

Who shall reveal to them all these things? Their teachers. They must be nature's interpreters.

DR. G. STANLEY HALL, President of Clark University, Worcester, Mass.—As I sat in my corner, during the reading of the last paper, I asked five or six gentlemen on each side of me to interpret a type, I suppose, of nature symbolism, which has troubled me during the session of this association. If you cast your eyes to these marvelous, many-colored spheres which cover the walls and ceilings of this room, I think anyone with an artistic mind will feel discouraged at the interpretations given by my friends. One said it must be the "music of the spheres" in some way represented there. Another suggested,—"Why, it is a demonstration in astronomy conceived by an infant mind." Another believes it

is somehow or other connected with chemistry, but my own impression is—I won't say it is mine for it really was suggested—that it somehow or other symbolizes the many ways in which nature study has been interpreted by the speakers here this morning. I do not care a copper whether you begin in one of these ways or the other, or what interpretation you put upon nature, provided only that you make as the first postulate of every kind of nature teaching that it must begin, and have for its chief object, a love of nature. It is making bricks without straw to attempt to instill automatically, through all the nomenclature of your teaching, a love of nature study without a long course of the poetical, of the mythological love of nature. I believe that in the normal school in Chicago and various other places, the right end of the true thread in this complicated labyrinth has been at last found. The whole thing, as I look at it, is this,—What are the four branches of education from the kindergarten to the university. Science comes somewhere in the course, no matter which is first, then art, literature, religion. These four can summarize the types of education, and where do they all begin. In nature study, every one of them. Science rests upon the love of nature. It is idle to attempt to inculcate a love of nature in the university or in the college unless the child has been taught to love her forms in the fields, gardens, hills, and valleys as country children generally do. It is the basis, then, of science. There is no other research or discovery in the world, and never has been, in astronomy, physics, chemistry, biology or any of the rest of the sciences that was not nourished by a genuine love of nature. Back in mythology, where all literature originated, you find the charming dreams of those students of natural phenomena.

Third, in religion the basis of all is love. All religion when rightly taught is a love of nature. All forms of religion, whether natural or revealed, are the same and find their truths in the world about them.

To conclude, then, I think that we can sum up all the discussion of this topic, which to my mind is by far the most important of all the topics to come before this meeting of the association, by saying that every department of knowledge must be taught by inculcating in every possible way the love of nature. For what is nature? The great Mother of us all, the reservoir of every kind of force, the force that makes the electric light, that makes my heart pulsate, my food digest, that makes my voice, that makes my thought, that makes anything, every thing. Nature is not dirt; it is not material. There is no scientific man today in all the universities of the country—save perhaps two or three, as far as my inventory goes—that is a materialist as that term is sometimes used. Materialism is as dead as dirt. It is entirely lost and the student has been elevated by a study of nature. The study is regarded as purely dynamic—this is spiritual and from the study of nature the student has come to worship at her shrine. By and by there will be a revelation of her great mysteries. There is a very current error among people that the humanities are arrayed against nature—not at all. The history of the race, the psychology of the child, shows there is nothing in primal life save the child and the man, the culminating flower of nature. Does not all nature center in man? Is not everything summarized? Does not every perfect flower find its consummation in the child, to minister to which is the highest of all human service and the most perfect of all religions? Don't you realize, fellow teachers, that we are living in a time of great earnestness and interest in nature study? Go into any bookstore and ask what books are sold there mostly during the last five years and they will tell you nature books and all those countless books of flies and moths and leaves and butterflies and astronomy. I am told by the booksellers that they are astonished at the eagerness with which people are going back again to the primal sources of life.

Finally, I remembered with religious sacredness, as I came the other day from the old church where I sat in the country as a boy, listening to revival sermons from that good old clergyman long since dead, I remembered how my nerves used to thrill when he brought his sermons to a close and when he said, "Now, my friends, are you and you and you Christians? Do you and you and you really love the Lord Jesus Christ?" It sank deep; it made its impression, and I don't care what your theology or religion or non-religion is, I say today before I take my seat, with no less divine commission than that clergyman had, and with no less earnestness, and no less solemnity,—Fellow teachers, do you and you and you individually love nature in this day of great awakening? Do you really love her in any aspect of her manifold manifestations? Is this great movement that is passing over the entire world yet to touch your souls, or are you to be hardened against this higher, this new movement of the Holy Spirit? Why will you be strangers to this great love? I know of no better analogy of nature than that phrase of the poet who said of his ladylove: "I cannot see your countenance, love, for your soul that is so much purer." So we say today of nature, we cannot see her countenance for her soul.

Love nature. Infect the children with it and you will lay deeper than in any other way, than in all the other ways, the foundation for which the school and the church exist.

THE AMERICAN PUBLIC SCHOOL.

BY GEN. STEWART L. WOODFORD, BROOKLYN, N. Y.

[STENOGRAPHIC REPORT.]

This week witnesses the gathering of three great conventions. At Washington, the representatives of a large section of the Christian church are met to take counsel together for good citizenship and for the prosecution of Christian work. Here in Buffalo, the teachers of the nation are met together; and a little farther westward on the lake, there is a gathering of the representatives of a political party which numbers within its membership nearly half of the voting population of the nation. These three conventions typify and represent three great forces: the force of Christian civilization, the force of education, and the force of politics as applied to the practical problems of citizenship. Without suggesting anything that bears upon the parties in this great gathering of citizens, every thoughtful teacher and citizen must realize that the force of a political party for good, or for evil, depends upon essential (not sectarian) religion—the effect and control that essential religion and thorough education have upon that political party. This great nation of ours, ruled by the votes of our own people, will be ruled wisely so long as the essential purposes of the Christian church and of the public school control the political action of the nation. But, as certain as death comes to the individual, so sure is it that death will come to the nation, if the home, the

church, and the school fail in their purpose of elevation and of instruction.

Your committee were very kind when they relieved me from spending any time in selecting a text. They gave me "The Public School," they added the words that are a speech in themselves, "the nursery of American patriotism." I feel a diffidence in talking to a body of teachers. I am conscious that I need to learn so much, and am able to instruct so little that I crave indulgence for the very primary, or rudimental form in which I shall put the little that I have to say to you tonight.

The public school, with the home and with the church, is the nursery of American patriotism. Any thought which puts the school above the home seems to me radically wrong. The nursery of absolute patriotism in every land, in every age, and under every flag, has been the home. There never has been, and I think there never will be, an enduring nation, with all that makes a nation strong and great, that is not based upon pure homes, loving mothers, wise fathers. The essential training of childhood begins in the home and the nursery of the home. But, next to the home, must forever come the school. These things, I suppose, are trite to you, and yet in a varied experience of an active life the thought has been forced upon me continuously, that the preservation of the higher elements of national life depends upon you, who are the teachers, not upon the politicians, not upon the statesmen. You meet the children at the beginning; if you train in them what makes for good citizenship, you have made citizens; and in making citizens you have made a nation and you have glorified the flag. The public school brings the children of the masses and the children of the classes in close touch, at a time when character is formed. I doubt whether the academy, with high-priced tuition, welcoming within its borders or circle only the children of what we erroneously call the upper classes of society,—I doubt if that academy can ever be an effective nursery of a true citizenship. But, in the school, where the boy of the banker and the girl of the blacksmith meet; where the boy of American parentage and the girl of German parentage associate; where the children of all classes and conditions are brought together,—it is there the children learn each other's work. They learn that brawn and will and intelligence, and not pocketbook and social distinction, constitute the essence of life, and of true girlhood and boyhood,—of manhood and womanhood. The children of a democracy, in the public schools, are brought upon one platform, and upon one level of common effort and common aspiration. It is that which makes the child essentially self-respecting, and a representative citizen as the child grows up. The public school gives him an intelli-

gent instruction in the real resources of the land, the geography and the history of the country, which will feed patriotism from the beginning.

But a few weeks ago, Mr. President, it fell to my lot, as a member of an examining committee, in one of the institutions of higher learning in our country, to test young people who had just applied for admission, in their knowledge of geography, of the physical resources, and the history of this country. I found a girl, who had passed her examination for one of the leading female colleges in these United States, who could not bound the state of Iowa; who could not tell me the capital of Nebraska, and who was absolutely ignorant of the main products of the state of Kentucky. Now an education at an academy that has produced a scholar in French and German, who was well taught in the rudiments of several of the sciences, and yet utterly and painfully ignorant of the civil geography of our own country, that education would never be a nursery of American patriotism anywhere. I do not know how you would train your children, but I shall have been paid for coming to Buffalo, and you will have been paid for giving fifteen minutes in listening to me, if you see to it that every child from ten to fifteen, under your training, before the next springtime, comes to understand the geography of the United States. Being a little surprised at the peculiar results of this investigation in the matter of geography, I asked of the next young man who was subject to my inquisition, "who was the second president of the United States," and was astonished to find that Andrew Jackson held that position in the records of the nation. I asked, "Who was the first secretary of the treasury," who framed the financial system under which the nation lives today, and was told "it was Robert J. Walker." Now an academic training for a university admission that permits such ignorance of essential historic facts, and essential historic personages, in this republic, can never breathe nor foster a stalwart American patriotism. If you would make the school do its work in relation to the state, let your children know what the state is in which they live. Let them know something of the history of the country in which they live. Let Washington be to them a fact and not a mythological character. Let Hamilton be to them a teacher, and let Jefferson be a living inspiration.

My friends, the citizens of this country are essentially honest, whether a man calls himself a populist, a democrat, or a republican. The average citizen in this republic loves the republic and honors the flag and seeks to vote so as to honor and strengthen the nation and the flag under which he lives. When men err in political action, it is more frequently because of ignorance than it is through sheer self-

ishness or lack of patriotism. If I could reach every teacher in this great audience tonight, with an earnest appeal, it would be—train your children in the rudiments that make for citizenship; train your children in that larger cultivation that stands for patriotism. Put the flag above every schoolhouse, as you would put the cross above every church. Put the schools of this country into the politics of this country, and keep the politics of the country out of the schools of the country.

You have listened patiently. I fear that I have reached the limit of the time that your president assigned me; and yet in parting let me tell you a little incident that illustrates, better than words of mine can, the value that a good citizen puts upon the school and the teacher. In my city of Brooklyn there dwelt for years after the close of the war the greatest soldier whom New York gave to the armies of the Union, General Henry W. Slocum, who commanded one of the wings of Sherman's army in its march from Atlanta to the Sea. He had been honored with distinguished offices, alike in the state and in the councils of the nation. A few months before his death, meeting him on Clinton Avenue, near his home, we fell into a chat about old army days. I told him how pleasant it must be as the snows were beginning to fall upon him, to live in the honor and love of his fellow citizens of Brooklyn. He stopped me for a moment, and then said, "I have been very fortunate in life, and yet there is one thing more that I want. The mayor will soon have to appoint a board of education in our city; I should not like to ask for anything for myself, but you know the mayor well, and when he comes to make his appointment, will you suggest to him that I would like to spend the last years of my active life as a member of the school board of Brooklyn, for I feel that I can do more good in helping the cause of education for the children, than I ever did even in command of a wing of Sherman's army." That was the estimate that this great soldier put upon educational work. Oh, teachers, value it, respect your work, respect yourselves; you are doing more than to fill great offices; you are doing more than to accumulate great wealth. All that we do for others we carry with us into the larger life as a part of the eternal possession. All that we do selfishly for ourselves we lay down when we cross the brink of the grave.

And now, dear friends, with cordial thanks for this kindly greeting here, and with sincerest wishes that your work may make for good character, for good living, for good citizenship, for the welfare of the nation, and for the honor of our flag, I bid you good night.

THE TEACHER AND THE SCHOOL.

BY RT. REV. JOHN LANCASTER SPALDING, BISHOP OF PEORIA.

Public education is a people's deliberate effort to form a nobler race of men. It is of paramount importance, because other things which the national life fosters, as growth of population, increase of wealth, abundance of food, comfort, facility of travel and transportation, political, social and religious freedom, are but means to the one end of human effort, which is to make man himself wise, strong, loving, reverent, pure and fair. India and China have half the population of the earth, but we care not for them, because their life is unintelligent, unprogressive, and uninteresting. We look to kind more than to numbers and magnitude. Microbes are more numerous than men, trees are larger.

When we consider the universal stream of matter, the human race appears to be of little more importance than the insect tribes which fill the air of a summer evening. The earth spins on in its double whirl, the stars gleam, the heat glows, the rain falls, the rivers flow, the seasons come and go, bringing life and death to the children of men as though they were but flowers which bloom in the morning and die at evening. But when we deepen our view, we perceive that the thought and love of man give to matter its spiritual element, its truth and beauty, and that he therefore is of a higher order and of more worth than all the orbs which fill the limitless expanse of the heavens. In the same way, when we look at the human race itself, the individual appears to be insignificant, but when we come closer we are made aware that it is the individual who guides the mass to weal or woe. He founds religions, molds heterogeneous tribes into nations, creates civilization, art, literature and science. He undermines faith and hope, or uplifts and holds the multitude to the consciousness of God's presence in the world and in the soul. The race forms the individual, the individual gives rank and importance to the race, which exists and acts only in and through him. Hence the highest functions which a people can perform is to assist the individuals of which it is composed, to bring forth within themselves the qualities which make them human, which make them true and good and fair and wise. This is each one's life task, which is never finished, for it means ceaseless effort, strong and great-hearted striving for the best. This is what religious minds teach when they tell us that it is man's duty to grow like to God,—God who is power, wisdom and love, in unimaginable excellence, the perfect being, the highest of which it is possible to

think. This is what philosophers affirm when they declare that a man's proper business is to make himself reasonable, virtuous and humane; that he may become self-active in the service of truth, beauty and goodness. The ideal is human perfection; the means whereby it is approached is self-activity. We are men only so far as we are self-active. It is this that makes us capable of thinking, observing and feeling; it is this that gives us power to speak, to do, and to control our action. It is by rousing us to self-activity that God and nature work upon us, and it is by doing this that the teacher educates. The activity which nature, when left to itself, calls forth, is chiefly physical and animal. Savage tribes have dwelt from immemorial ages beneath the splendors of sun and moon, have seen the dawn and the gloaming and the starlit heavens, have walked by the sounding ocean and by wide rivers, have looked on the glories with which the season's clothe the mountains and the plains, and yet their spiritual nature has remained untouched. They have continued to lead the lower life, groping in the darkness of ignorance and passion. It is not possible to give what we have not, and as nature is without thought and love, it can not, of itself, awaken thought and love. This only the thinking mind and loving heart can do. Only they, who are developed, educated, and formed, can develop, educate and form others. Each one's educational influence is measured by the knowledge and culture which he has made his own; and since knowledge and culture are vital and genuine in those alone who strive seriously and with perseverance to improve themselves, it follows that only they are true educators who are all the while busy upbuilding their own being, by increasing their power of knowing and doing, by deepening and purifying their power of hoping and believing and loving. No good work is ever done by men who do not put their heart in the work. Best work is possible only to those who take more delight in doing the thing well, thoroughly well, than in any reward they may receive. Men of genius create master-pieces because they throw their whole life into the task, believe in it and love it with all their might, heedless of what impression it may make upon others. Their art is for them a religion, an integrant part of their being, in which if they do not live, they die altogether. They never cease to strive, because they are guided and ruled by an ideal perfection to which, however great their gifts or their performance, they never attain. They feel that they may yet do better things, and hope and confidence keeps them fresh and strong. They *become* and find themselves in their work. They grow with it, and rise with it toward the truth and beauty of which it is the symbol and expression. Though every teacher cannot have genius, every real educator works in this spirit. He is a lover of human per-

fection in himself and in others, and he has a living and abiding faith in education as the great means whereby this highest end may be attained. Reflection and experience have taught him that what he is is of vastly more worth and import than what he knows; that it is not his knowledge, his eloquence, his tact and skill, which are the true educational forces, but himself, his mind, his character, his will. If the young are to be led to yearn for learning, and to become self-active in the pursuit of excellence, his personality more than his words must be their inspiration and guide. If in the matter of education they are to be believers, and not infidels, their faith must be fed and sustained by his own. If he hopes to inspire them with high and generous sentiments, he must trust to his life not to his own words. Truth and goodness are life, and they propagate themselves only through the lives of those in whom they have become incorporate. The believer makes believers, the striver makes strivers, the lover makes lovers. The orator, it was said of old, is a good man who is skillful in speech. The educator, we may say, is a good man who loves human perfection, and who with faith and hope and tender patience labors to bring it forth in himself and in his disciples. He must be a genuine believer in education, in its power to uplift and transform men. He must cherish it for this power, that is, for itself; and unless he work in this spirit, he may be a trainer, but not an educator.

The question of education is much simpler than we imagine. And most of what is written and spoken on the subject serves but to obscure that which is plain. Its object is to produce vigor and activity of body, mind and conscience. To this end the whole process of teaching and discipline should be made subservient. In the primary stage, up to the age of fourteen, the leading idea should be nutrition of feeling. Help the child to see and hear and feel; to wonder, admire, and revere; to believe, hope, and love. The whole material world lies open for those who know how to look and listen; awe, admiration, and reverence, are elementary feelings which touch the source of all higher life; faith, hope, and love are the living waters wherein young souls delight to bathe. Power of believing is the measure of human power. Israel believed in God, Greece in culture, Rome in law, more than any other people that has existed, and for this reason they have played the chief rôles in the history of the race, and are still alive wherever men think and strive for better things. In the real sense of the word, truth is never learned at school; but minds rightly educated there, learn it later through their own self-activity and through experience of life. Whatever the child is taught, whether it be reading or writing or arithmetic, or something else, has educational value only in as much as it rouses and develops his spirit-

ual nature. There is no abstract education as there is no abstract love. It is a process of life, a contact of living beings, acting and reacting upon one another. We may train a child as we train an animal, but when our work is done, we have only a trained animal. If we would make him a man, we must teach him to look and listen, to admire and revere, to think and will and love. Far more depends on what we love and what we hate, on what we hope and believe, admire and revere, than on what we think and know. Education itself is promoted by willing rather than by knowing. He who has a live steadfast will to learn and love whatever is high and true and good and fair, has within himself the principle and power from which education proceeds; and they who rouse and strengthen the will to strive through a lifetime for truth and justice and freedom and light, alone deserve the name of teachers. How can we will that of which we are ignorant? Through faith, through an instinct akin to that which leads the herd to springs that lie hidden in the midst of deserts; and to awaken and guide this is the teacher's great task. There are ideas and sentiments, and aims and hopes, which are held to be true and good by all men. They lie at the root of human life and character, and to turn from them in the process of education is not to educate but to prevent. He who awakens and confirms the faith of his pupils in the priceless work of intellectual and moral power, is the best educator; for thus he turns all their energies to the life work of self-education. This is the highest aim, for whoever is self-active in learning and doing what is true and good and beautiful, in his private as in his public life, has education and continues to educate himself. It is impossible to desire that of which we feel no need; and one can not rouse the young to faith in the supreme worth of knowledge and virtue except by making them conscious of their infinite need of them. Shall we hope to entertain with accounts of the heroic struggles of the great and good those whose only idea of pleasure is sensual and brutal? Shall a prize-fighter take interest in a philosopher; a mammonite, in a poet? Desire begets desire, hope inspires hope, faith creates faith; and if the teacher is to be an educator, he must be a striver for knowledge and virtue, a lover of human perfection, a believer in the efficacy of rightly directed effort. Example has greater educational value than any possible verbal instruction, and a wide, strong, cheerful, patient, punctual, and loving man or woman in the school can do more than a consummate orator could accomplish there. As the mind is the man, so the teacher is the school, the material structure being comparatively unimportant. The greatest educator who has appeared on earth, instructed and found his disciples while he walked along lonely roads, or while he sat by the

well, or on the hillside, or while he stood in the bow of a fisherman's boat. And Socrates, the world-teacher whom we place next to him, taught wherever he found hearers, whether on the street corner or in the gymnasium or on the public highway. Such a teacher, too, was St. Paul, the great heroic heart, whose deep and awful conviction of the life-giving and indispensable nature of truth, had made him truth's bondsman. Give the right man or the right woman a log cabin and divine work shall be done; place formal and callous teachers in marble palaces, and they shall be caught all the more hopelessly in the machine which destroys life. In taking visitors through our towns we point with pride to our large, imposing school buildings. We are like rich men who show their libraries, that they may boast of the binding of the books and the editions de luxe. Here, if anywhere, we should look not at the vessel, but examine its contents. The great house concerns us little, the kind of life found and fostered there is the all in all, and of this the material structure can give us no proper conception; or may I not say that these large buildings, where five hundred or a thousand children are gathered are a hindrance to the work of teachers and pupils? Whoever has driven through our western states has noticed the little schoolhouse, standing alone in the corner of a field. There is not a tree to shelter it, not a flower to smile upon it. The farmer's barn half a mile away is more finely built and stands on a more favorable site. Do he and his neighbors give more thought to the breeding and raising of cattle than to the education of their children, as they are more attentive to the strain where there is question of their domestic animals than where their own offspring are concerned? It may be so. At all events, that little schoolhouse, hardly bigger than a dry goods box, above which no bough waves, around which no flower blooms, near which no brook flows, is as it stands there by the dusty or muddy road, in solitude and nakedness, weather-beaten and discolored, a better place for education, whether we consider the teacher or the pupils, than one of our great factory-like structures. It is in the country; and it is better, where there is question of health and growth of body and mind, to be a country boy and to be allowed to play with freedom, about the face of nature in all her moods than to be the nursling of a palace in a great city, just as it is better, from the educator's point of view, to study the habits of an insect, even, than to gaze at the display in a shop window. The closer we come to nature the nearer we approach the source whence spring life and truth.

In cities education is most difficult. City populations are decadent, and would die out if they were not reinforced from the country. There the home, which is the fountainhead of the life of a civilized

people, is less potent and less sacred. Parental authority is undermined. Fathers and mothers, seeing that their influence is weakened by their environment, become careless, and since the state provides free schools they throw the responsibility for their children's education upon the state, and flatter themselves that in sending them to school they have done their duty. They, who are the true God-appointed teachers, neglect their office, and, like all the neglectful and incompetent, they are quick to find fault with others. They inculcate respect for the school neither by word nor example; and therefore the authority which the state has assumed, and which they have gladly delegated to it, its teachers are unable properly to exercise. In abandoning the care of their children's education, they give up all thought of their own. The primary duties of the family are not performed, and the family degenerates. The children are idle, unpunctual and heedless. Their attendance is irregular and the average for the school is low. The teachers are at a disadvantage. Their classes are overcrowded; they find neither respect nor appreciation, and since they see that the parents take no genuine interest in the education of their children, they feel that they labor in vain. It is futile to strive to awaken a desire for knowledge and virtue in those whom conceit or callousness makes self-satisfied. They find it impossible to perform their tasks with glad hearts and fresh hopes, like sowers and reapers who sing at their work, and they must have exceptional courage if they do not sink to the level of drudges and hirelings. Thring says that the life of many teachers may be compared to that of a man digging, knee-deep, in a muddy ditch, with banks high enough to shut out the landscape, in a hot sun, with a permanent swarm of flies and gnats around his head.

We are, doubtless, far away from the time when the pedagogue was a slave, far from the later ages when he was paid and treated no better than the lowest menial. It has, indeed, become the fashion to extol, in sonorous phrase, the dignity and importance of the teacher's calling. We recall with pleasure, the names by which it has been made illustrious. Did not the Savior of men teach as well as he wrought? Socrates, Plato, and Aristotle, Seneca and Quintilian, St. Augustin and St. Thomas of Aquinas, Bossuet and Fenelon, Milton and Locke, Kant and Hegel,—immortal names, who dwelt upon the summits of intellectual and moral power, were teachers. In truth all great men are teachers, in word or deed. The hero, the saint, the philosopher, the poet, the orator, the statesman, the warrior, whether by their example or by their utterances, rouse men from sluggish and animal life, to high thoughts and aims, to noble sentiments and resolves. They are leaders in the way of progress, and from the

heights which they have ascended, athwart innumerable obstacles, their voices ring out to cheer those who struggle in the plains below.

In the present century education has become a science, and teaching an art as well as a profession. The schoolmaster has risen to the rank of the physician, the lawyer, and the minister of religion. The social importance of his function is widely recognized, and the public, it would seem, looks, theoretically at least, with more favor upon him than upon the physician, or the lawyer, or the minister of religion. He is believed to be more unquestionably a public benefactor. He is a developer and shaper of life and destiny, and, as Horace Mann says, "One right former is worth a thousand reformers." It is indeed difficult to exaggerate the worth of a true teacher, of one, who, loving children with a love akin to that which glowed in the divine heart of Christ, is wise and strong, watchful and patient, who, while he awakens and holds attention is able to enter the child mind to make it active and conscious of itself by rousing the thousand images of truth and beauty which slumber there; who has faith in education, and knows how to inspire his pupils with a genuine belief in it, as the one power given to man whereby he may lift himself to higher and higher planes of life; who, being a genuine lover of human perfection, strives to make himself as well as them perfect in body, mind and heart. One who approaches, even, such an ideal, would be God-like, would be a glory, not of his profession only, but of his country and his race. The profession does not honor the man, but the man the profession; nor does the profession disgrace the man, but the man the profession.

But lest we lose ourselves in the contemplation of the ideal, let us descend and draw closer to the facts of life. No serious thinker who has given attention to pedagogics, will deny the importance of right methods, of good text-books, and of a proper choice of the subjects to be taught, in the light of the relative educational values of the different branches of knowledge; and if one should permit himself to be controlled by what he reads and hears in books and magazines and meetings, devoted to questions of education, he would be led to believe that these and like matters are of primary and paramount importance. This would be a fatal error. It is, in fact, an error as widespread as it is fatal, one which obscures the central fact, and leads away from vital truth into quagmires and quicksands. Methods and other devices are mechanical, and machinery is as powerless to educate as to propagate life. One of our worst superstitions is the belief that we can develop, strengthen, and ennoble mankind by machinery and by talk about machinery, and so we argue about it and about it, and keep far away from the inner source from which all life

and truth and goodness proceed. Mechanical minds are the cause of half our woe and misery, and we have all had opportunity to observe that they who most abound in words have little depth of thought, little strength of conviction, little power of will.

The teacher is the school. What the soul is to the body, what the mind is to the man, that the teacher is to the school. A good teacher will find or devise good methods, and will employ them with discernment, dealing with each pupil as an individual soul, unlike any other that exists or has existed. His very presence commands attention, solicits interest and suggests thought. He is alive, and he awakens life. His pupils learn to feel that it is good to be where he is, and they follow him as gladly as though he led them into the balmy air of spring along the flowery banks of limpid streams.

The question of education is a question of teachers; and the problem to be solved is how to induce the best men and women to become schoolmasters and schoolmistresses; for such men and women alone can do good work, whether in primary schools or in colleges, or in universities. They are as indispensable for the child who is learning to read and write as for the youth who is studying science and philosophy. In every stage of the educational process development of faculty, strength, and skill are the object, while knowledge is secondary. The teacher must know how to deal with human minds, and his chief concern, therefore, can never be with imparting anything to them, however valuable it be, but his study must be how to open them to the light, how to give them flexibility, how to make them attentive and self-active. His work is a wrestling of mind with mind, and of heart with heart; and if he simply drills his class as a whole he fails as a teacher. He is a trainer and not an educator.

If the teacher's labor is important and sacred, his task is severe, his calling hard. To remain vigilant and alert, hour after hour, day after day, for months at a time, is wearying and exhausting. To be always in active contact with crude minds, some of whom, whether from inheritance or from neglect and vicious habits, are almost uneducable, wears the nerves and puts one's powers of patience and endurance to a severe test. In the midst of such an environment the fire of enthusiasm and the freshness of spirit is lost. The law-
yer, the doctor and the minister of religion are less constantly occupied with the common people, more their own, they work in a wider field, they are chosen for their special gifts, they are more in the public eye, more appreciated, are better protected from the wear and tear of a sole occupation, their labors are better paid. It is the seductive allurements which trade and commerce offer in the face of all this, shall we hope that the

most aspiring, the most active and the most capable minds among our young men and young women, will choose teaching as their calling? If we except a few eager and brilliant natures who will climb and sparkle, whatever their occupation or profession may be, what hope of advancement is there for the tens of thousands of the teachers of our common schools? Or if advancement is possible, is it not so uncertain or so slow or so inconsiderable that it stirs no glad anticipations? Teachers, like all of us, must live on hope, and if their calling gives them little nourishment for hope they will look away from it to some more promising source of joy and happiness. Teaching will not be followed as a vocation, as a life-work, but as an expedient. Why is there an almost total lack of male teachers in our primary schools? Is it not because young men understand that while the teacher's task is severe and ungrateful, his reward of whatever kind is smaller than that of other professional men, insignificant, if compared with what he might expect in becoming a politician or a merchant or a banker? Why are nine-tenths of the teachers in the primary schools women? Is it not because they, being either shut out from the other professions or finding access to them very difficult, and being unable for the most part to become politicians or merchants or bankers, are driven by the force of circumstances into the schools? And then, though their salaries are small, they earn better wages as teachers than they would receive for most other kinds of work which women do. Women rarely get the same pay as men for the same work. This doubtless is chiefly due to their exclusion from so many occupations, which results in an over-supply wherever there is a demand for their work. Whatever the cause may be, the fact is that in the fields in which large numbers of women are employed, labor is cheap; and it is the cheapness of their labor, and not their superiority as teachers, which makes competition with them for positions in our primary schools so difficult. That this is a very grave evil is obvious. They who are content to accept cheap work in the school can have no idea of the meaning of education. They would degrade it to a mechanical process, and imagine that the teacher does his whole duty when he makes his pupils learn to read and write, and gives them some knowledge of arithmetic, geography and history. They believe that those who pass an examination and show that they know enough to do this are worthy to be entrusted with the teacher's office. They fail to see that the important thing in the primary, as in every other school, is not what the child learns, but development of faculty and acquisition of habits. If he is made active in his spiritual nature, his mind will become supple and vigorous as the body is made supple and vigorous by exercise. Being makes action possible, and the kind of being determines the

kind of action. The intellectually active alone can rouse the intellect, the morally active, the conscience; the religiously active, the soul. The lower cannot call forth the higher. He who is not a thinker cannot make others think, who is not a lover cannot make others love, who is not a doer cannot make others do. A liar cannot lead truth, or a boor gentlemanlike behavior. If we are to have good schools we must fill our homes of education with such men and women as we desire our children to become.

The teacher's personality far more than his learning determines his value as an educator. The very presence of a brave, noble, generous and cheerful man illumines and strengthens. He compels recognition and obedience though he neither speaks nor commands, and they who have known him never lose faith in human nature, or in the worth of knowledge and virtue.

The ideal to have educational powers must gleam through the concrete. The ethical ideal is the ideally ethical man, the intellectual ideal, the ideally intellectual man, the religious ideal, the ideally religious man. If we would move and influence the young in a profound and lasting way, let us acquaint them with the ideal incarnate in the persons of the teachers whom we place over them. But how shall we ever hope to make approach to this end, if we look upon the teacher as a piece of mechanism whose cheapness is an important consideration?

All schemes, plans, systems, and methods, prove futile in the hands of the incompetent. Inferior teachers make inferior schools. An educated man is never boastful, nor is an educated people; but if we must extol ourselves, let us remember that hitherto the school has been but an incidental factor in our progress. Much of it is due to the spirit of our race, much to our Christian home, much to the churches, much to the conditions of a new country, in which freedom and unlimited opportunity stimulate to self-activity, much to the fact that the young and the enterprising have for more than half a century been coming from Europe in multitudes to our shores. Professor Laurie, who is a competent and an impartial judge, says: "America is an uneducated country as we now understand education. It possesses no national system; it has not even the machinery whereby education could be given in the sense in which it is given in Great Britain or Germany." Listen to the conversation which one may hear on the street or in the cars, read the newspapers of our towns and of some of our great cities even, and it will be difficult to deny that there is at least a degree of truth in this assertion. Corrupt and incorrect language mean that there is no education or a faulty education. Debased speech is evidence of debased mind. Inaccuracy

proves that the powers of attention and observation, which it is the purpose of the school to cultivate, are undeveloped. The lack of patience, of perseverance, of faith in the power of obstinate and long-continued effort to transform one's being, the absence of the nobler kinds of ambition, in our young men especially, are proof that in the school their higher nature has not been touched and made self-active.

It is a happy omen when the best minds in a nation occupy themselves seriously with questions of education. This is what happened in Germany at the close of the last, and in the early part of the present century. Kant, Goethe, Fichte, Wilhelm von Humboldt, Richter, Krause, Herbart, and other men of genius or talent, threw themselves into the subject with enthusiastic zeal and confidence. The result was a reawakening of the people a rebirth of the national spirit, and a general desire for broader and deeper culture.

With us the school question seems to be a matter of interest chiefly to declaimers and politicians, who make it a popular cry wherewith to drown the voices of earnest and enlightened thinkers. They rally round the little schoolhouse, plant the flag on it, and, like Barbara Fritchie, look out the window, expecting to see the waving of rebel banners and to hear the tread of armed hosts marching to its destruction. They are clowns who play to the rabble, or selfish and designing men, who make use of shibboleths, to discredit and ruin their compatriots and fellow citizens. When educated and serious men, who strive to see things as they are, as all cultivated minds must strive to get real views of whatever they contemplate, utter their honest opinions on this subject, a clamor is raised against them, which would be of small account, were it not for the fact that it tends to make the calm and enlightened discussion of this, our greatest national problem, difficult and ineffectual. Our public thought crystallizes in the mold of party and sect and clique and faction, and they who refuse to narrow their minds, but resolutely believe that it is possible to live in the wide and tranquil realms of truth, appear to be visionary and idle, or even perverse. Original and profound thinkers are rare among us, because our ablest men are consumed by politics and business, or driven into the noise and confusion of endless controversy, or sacrificed to one or the other of our many schemes for reforming the world and doing away with all evil.

It is Emerson, I think, who said that he would cross the ocean to talk with one great man rather than to see all the monuments and the treasures of art of Europe. Life is the subject of supreme interest. Everything depends on quantity and quality of life. The school, however perfect the system, however admirable the devices, can do the best work only when it is in the hands of the best men and women.

Education is, in a word, the stimulation of life, the rousing of endowments to the activity which produces faculty. As life proceeds from life, so life is developed by life, and the kind of development depends chiefly upon the kind of life by which it is promoted. The problem which most deserves the serious meditation of the lovers of human protection, who are also necessarily lovers of God and country, is how to make the teacher's calling attractive to the men and the women who possess, in a high degree, quantity and quality of life, so attractive as to be followed as a life-work, and not taken up as an expedient until something more pleasant, or more secure, or more lucrative is offered. How this may best be done is a subject which will be found more and more worthy of deliberation in these annual meetings of the National Educational Association. Its appellation is a good omen, for it implies that our school system should be a national system. A national system would enable us to remove the schools from the tainted air of politics, it would raise the standard of the teacher's profession, it would make his position more secure, and the recognition of his work more certain. It is said that a people has the government which it deserves. Let us, coming down to a lower plane, content ourselves with affirming that a school board has the teacher which it deserves; would the directors cross, not the ocean, but the township or the county line in search of a real teacher? If it takes a hero to know a hero, it takes an educator, or at least an educated man or woman, to know an educator. Inferior teaching in the primary schools implies inferior education for the masses of the people, and for those even who enter the colleges and the universities. School barracks which contain five hundred or a thousand pupils, with class rooms into which sixty or eighty children are crowded, are not places of education, but places of repression, confusion and perversion. In such environment neither the teachers nor the learners can do good work. There is no indifferent school; the school is good or bad, it improves or perverts. Another matter which deserves attention is the number of schoolhours. Not length of time, but intensity of application, is the important thing in all spiritual effort, and to attempt to do mental work when one is mentally weary, is not merely useless, but hurtful. Study prospers only when the mind is vigorous, and the heart fresh. Tired children exhaust the teacher, as a dull and heavy teacher wearies the class. The young are most sensitive to fatigue of mind, and if kept too long in the class-room, they become inattentive, indifferent, and careless, and a distaste for study and a dislike for the school and the teacher grows upon them. A real teacher will accomplish more in four hours than he could accomplish in six. His pupils will come to school with glad hearts, will apply

themselves industriously and will not leave the class-room like released prisoners. Plato found an argument for the belief that our souls have lived in other worlds, in the quickness and eagerness with which the boys of Athens learned. If we would labor effectively to develop a nobler race of men here in America, let us work for the teachers, let us strive to raise the standard of their professional life, to render their position more secure, their task more pleasant, their reward greater and more certain, that the teacher's calling may appeal not to the most active and intelligent young women alone, but to the most active and intelligent young men as well. Then, indeed, shall the boys and the girls of America learn with quickness and eagerness, and when they quit the school, they shall quit it, as true lovers of intellectual and moral power, who are resolved to spend a lifetime in unfolding and upbuilding their own being and in helping their fellow men.

DEMANDS OF SOCIOLOGY UPON PEDAGOGY.

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At the risk of seeming to reopen a closed incident of ancient history, this paper will take its departure from some passages in the report of the Committee of Ten. The present aim is to define a point of view quite different from that of the committee. In emphasizing the ends to be gained in education, rather than the means to be employed, the writer wishes to be understood as having in mind the whole school career. It is impossible within the limits of this paper to discuss laws or principles of variation which from this point of view should adapt methods to the learner's needs at different stages of mental growth.

"The principal end of all education," says the Conference on History, Civil Government, and Political Economy, "is training" (p. 168).

The sociologist develops this noncommittal response of the oracle into the following: The end of all education is, first, completion of the individual; second, implied in the first, adaptation of the individual to such co-operation with the society in which his lot is cast that he works at his best with the society in perfecting its own type, and consequently in creating conditions favorable to the development of a more perfect type of individual.

The Committee of Ten seems to have stopped at conclusions which tacitly assume that psychical processes in the individual are ends unto themselves. To be sure there are signs of a vague looking for of

judgment from the tribunal of larger life upon the products of this pedagogy; but the standards of a real test seem to have had little effect upon the committee's point of view. We are told (p. 168) that the mind is chiefly developed in three ways: (a) by cultivating the powers of discriminating observation; (b) by strengthening the logical faculty . . . (c) by improving the processes of comparison, *i. e.*, the judgment. We are further told that "studies in language and the natural sciences are best adapted to cultivate the habits of observation; mathematics, for the training of the reasoning faculties; history and allied branches, to promote the mental power which we call the judgment." The naively mediæval psychology behind all this would be humorous if it were not tragical. I need not label the pedagogic philosophy with which my sociology allies itself when I declare that sociology, in common with the most intelligent pedagogy of today, refuses to classify educational material along these lines. In the first place education is not an affair of perception, reflection, and judgment alone. Education connotes the evolution of the whole personality, not merely of intelligence. In the second place, if I am not mistaken, a consensus is rapidly forming, both in pedagogy and in sociology, to the effect that action in contact with reality, not artificial selection of abstracted phases of reality, is the normal condition of maximum rate and symmetrical form of personal development. Sociology consequently joins with pedagogy in the aim to bring persons, whether in school or out of school, into as direct contact as possible with the concrete conditions in which all the functions of personality must be applied and controlled. In these conditions alone is that balanced action possible which is the desideratum alike of pedagogical and of social culture.

Once more the Committee of Ten was content to remain in the dismal shadows of the immemorial misconception that *dissecta membra* of representative knowledge are the sole available resource for educational development. I do not find among the fundamental concepts of the report any distinct recognition of the coherence of the things with which intelligent pedagogy aims to procure personal adaptation. The report presents a classified catalogue of subjects good for study, but there is no apparent conception of the cosmos of which these subjects are abstracted phases and elements. Nowhere in the report do I find recognition that education, when it is finished, is conscious conformity of individuals to the coherent cosmic reality of which they are parts. Until our pedagogy rests upon a more intelligent cosmic philosophy, and especially upon a more complete synthesis of social philosophy, we can hardly expect curricula to correspond with the essential conditions to which human action must learn to conform.

A graduate of a leading eastern university, who is now making an impression upon American pedagogy, said recently that when he took his diploma, about ten years ago, history to his mind was a collection of material which he had studied under Professor A.; political economy another independent body of information which he studied under Professor B.; psychology, another isolated subject which he had studied under Professor C.; and so on through the curriculum. Not until six or seven years after graduation did it dawn upon him that each of these details of representation is an aspect of one reality which the pedagogy of the college had concealed in making the fragments prominent. The most serious consideration about this pedagogical perversion is not that it limits knowledge alone. It distorts the whole attitude of men towards the world. Instead of introducing men to reality it tricks them into belief that an unorganized procession of pedantic abstractions is reality.

The report of the Committee of Ten presents to the sociologist, therefore, this anomaly: It is a whole made up of parts, every one of which may possibly be accepted by sociology; but the totality, as presented by the committee, sociology must peremptorily reject. It is hot on the trail of pedagogical and sociological truth, without actually coming within sight of the truth. Human personality is not doomed to struggle forever *seriatim* with a long list of detached groups of facts in order to get its psychic and social development. The world of experience is one, not many. Pedagogy and sociology are discovering this unity by different processes, and as a consequence of their perception that educational material is essentially one, not many, pedagogy and sociology are bound to combine their demands for a complete change of front in education. The proper educator is reality, not conventionalized abstractions from reality. Hence the demand of the new pedagogy, supported heartily by the new sociology, that schooling, particularly in its earlier stages, shall be changed from an afflictive imposition upon life to a rationally concentrated accomplishment of a portion of life itself. Hence the correlated demand of the new pedagogy, also seconded by the new sociology, that, so far as conscious effort is made by instructors to supplement the education of action by the education of cognition, the objects of contemplation shall be kept real by being viewed constantly as organic parts of the one reality. They must no longer be made unreal through analytic segregation which leaves them standing apart as independent realities.

Having thus by negation challenged some of the implicit concessions of the Committee of Ten to the old dogmatic pedagogy, and to presociological concepts of reality, I pass to a positive definition of

the outlook of sociology. I believe it to be also in the line of the pedagogy that will prevail.

Human experience is concerned with three knowable elements; First, man's material environment, inanimate, and animate; second, man himself as an individual, in all his characteristics, from his place in the animal kingdom, through his special physiology, psychology, and technology; third, man's associations or institutions. Sociology is the systematic attempt to reduce the reactions of these three elements—nature, man, institutions—to scientific form and expression. The inclusive reality which sociology finds comprehending both the processes and the products of these reactions is society, *i. e.*, individuals in association, within the conditions imposed by the material environment and modified by human achievement. The task set for each individual when he finds himself participant of this reality, is to accommodate himself to prevailing conditions in such a manner that he may both accomplish and enjoy a maximum share of the development which his stage in social evolution is empowered to accomplish.

This life task of men consequently sets the pedagogical task of teachers. The prime problem of education, as the sociologist views it, is how to promote adaptation of the individual to the conditions, natural and artificial, within which individuals live and move and have their being. It would not be in point to discuss here the relative place of action and cognition in progress toward this end. That belongs to pedagogical technology. I assume that both action and cognition are unchallenged means of modern pedagogy. With their proportions, and with the appropriate sequence at different stages of culture, sociology is not directly concerned. Sociology has no tolerance, however, for the pedantry that persists in carpentering together educational courses out of subjects which are supposed to exercise, first, the perceptive faculty, then the memory, then the language faculty, then the logical faculty, etc., etc., etc. On the contrary, every represented contact of a person with a portion of reality sooner or later calls into exercise every mental power of that person, probably in a more rational order and proportion than can be produced by an artificial process. Our business as teachers is primarily, therefore, not to train particular mental powers, but to select points of contact between learning minds and the reality that is to be learned. The mind's own autonomy will look out for the appropriate series of subjective mental processes. In the second place, our business as teachers is to bring these perceptive contacts of pupils' minds with points of objective reality into true association with all the remainder of objective reality, *i. e.*, we should help pupils, first, to see things, and

second, to see things together as they actually exist in reality. In other words, the demand of sociology upon pedagogy is that it shall stop wet-nursing orphan mental faculties, and find out how to bring persons into touch with what objectively is, as it is. The mind itself will do the rest.

In pursuance of this demand, sociology necessarily becomes an active partisan upon one of the pedagogical doctrines over which educators are divided, viz.: sociology denies that the rational center for the concentration of studies is any science or group of sciences. The rational center is the student himself. Personal adaptation to life means the given person's organization of his contacts with reality. In other words, pedagogy should be the science of assisting youth to organize their contacts with reality; and by this I mean to organize these contacts with reality by both thought and action, and for both thought and action.

Relatively the world stands still during the school-age of any person. The pupil himself changes visibly almost every day. The reality with which the pupil can have conscious contact is defined therefore by the pupil's own powers and opportunities. At each stage, however, himself on the one hand, and nature, men, institutions, on the other hand, are the subject and object of adjustment. A changing self has the task of adaptation to a surrounding frame of things, which daily displays new mysteries and complexities. The teacher's task is to help the individual understand this environment, of which the pupil for a long time seems to himself to be the center. It is the teacher's business to help the pupil understand this whole environment as it is related to himself. Presently, if the pupil's perceptions grow more penetrating and comprehensive, his own personal interests cease to seem the pivot on which the world of experience turns. His personality becomes extended, and at the same time his egoism gets balanced with the personal equation of others whose interests appear. The child finds the complement of his egoism in the family, the school, the group of playmates, the community, and at last, if his education is complete, in society at large. Yet, at each varying diameter of comprehension, life, of which the child is at first to himself the center and circumference, and later life as a whole, of which to the last the individual is to himself in the final resort the most interesting part—life, either individual or social, is the ever-present reality which summarizes all that men can positively know. This central and inclusive reality varies, in re-presentation, from socially unrelated individual life to a conception of individual life enlarged by evolved social consciousness into a function of the more abiding reality. This human career, either as pursued for himself by the

socially unconscious individual, or as a mingling of the individual with others associated by force of circumstances in pursuing purposes which none perfectly comprehend,—this life of men alike in nature, within conditions, imposing common limitations upon nature,—is the whole of man's range of positive experience and scientific observation. Sociology consequently demands of educators that they shall elaborate available aids, first, to perception by the individual of the relation of part to part in this inclusive reality—the life of men in society; second, that educators shall perfect influences to promote adjustment of individuals to their appropriate functions within this whole. The part of the problem which I have at present in mind is the proper direction and organization of the pupil's perceptions. So far as the subject-matter of sociology is concerned, everything knowable and worth knowing is a fact or a relation helping to make up this complexity which we call society or social life. The important claim of sociology in this connection is that this reality, like poverty, we have always with us. This reality as a connected whole, related to the pupil, is always the natural and rational means of education. A sequence of studies, in the sense that the pupil is to be enjoined from intelligent contact with portions of reality until other portions have had their turn, is a monstrous perversion of the conditions of education. All reality, the whole plexus of social life, is continually confronting the pupil. No "subject" abstracted from this actual whole is veracious to the pupil unless he is permitted to see it as a part of the whole. It is a misconstruction of reality to think and accordingly to act as though one kind of knowledge belongs to one age and another to another. The whole vast mystery of life, in all its processes and conditions, confronts the child as really as it does the sage. It is the business of the educator to help the child interpret the part by the whole. Education from the beginning should be an initiation into science, language, philosophy, art, and political action in the largest sense. When we shall have adopted a thoroughly rational pedagogy, the child will begin to learn everything the moment he begins to learn anything.

Am I demanding a pedagogy which presupposes one philosopher as teacher and another as pupil? Certainly. Every teacher ought to be a philosopher. Every child already is one till conventionality spoils him. More than that, he is also scientist, poet, and artist in embryo, and would mature in all these characters if we did not stunt him with our bungling. I would revive Rousseau's cry, "Return to nature!" but in a sense of which Rousseau never dreamed,—not nature in the burlesque of our ignorant preconceptions, but nature

scientifically explored, nature, the universal law of which is to own the sway of rational mind.

I am not asserting that grammar, and geometry, and geography, and geology, and history, and economics, and psychology, and ethics, as such, should be taught in the nursery. I am asserting that in the cradle the child begins to be in contact with that nature and society of which all these are phases and products, and reports. Sociology demands for the child, from the cradle to his second childhood, opportunities for such frank contact with life that its various aspects will confide to him their mystery in its real relations with the other elements of life. Sociology demands of the tutors and governors who lead the child through the formal part of education, that they shall pilot Wilhelm Meister so discreetly through his years of apprenticeship that he shall learn his world at the smallest expense and with least cause for regret both to others and to himself. Whether this citizen of the world shall ever learn to construe life in terms of the conventional sciences is an entirely secondary matter. The main thing is that, from the beginning, he shall learn to know himself and his world truly—so far as he knows at all,—in all essential relations. This involves the learning of such sciences as he does acquire in the character of excerpts from the whole book of knowledge, not as self-sufficient knowledges.

I repeat that sociology values subjects of study for reasons quite different from those traditionally alleged. Physical, biological, and social science, with the products of human thought deposited in literature, are worthy of study not because they are tonics for various kinds of mental impotence, but because they are, and only in so far as they are, revealers of man himself and of the life of which he is both creator and creature.

Without alluding further to other departments of knowledge, I may apply what I have said to the subject-matter of the social sciences in particular.

Sociology demands with equal confidence: first, that for everybody the study of *society* shall begin with the nursing bottle, and continue so long as social relations continue; second, that for most people the study of *sociology* shall never begin at all. If the argument thus far has provoked expectation that I shall recommend the introduction of sociology into the curriculum of the lower schools, as the needed corrective of educational defects, the inference is decidedly at fault. Only exceptional pupils should study sociology earlier than their senior year in college, and probably these few would do better to defer the study till after taking the bachelor's degree. While sociology proper is not a desirable subject for young pupils, our educa-

tional methods will be miserably inadequate to their social function till every teacher, from the kindergarten on, is sufficiently instructed in sociology to put all his teaching in the setting which the sociological view-point affords. This implies, of course, that the function of education must one day be taken so seriously that only men and women who have more than the bachelor's preparation will be entrusted with its direction.

The study of society which we may reasonably demand in our schools and colleges today must and should be chiefly in connection with the subjects physiography, political geography, anthropology, ethnology, history, civics, and economics. The sociological demand with reference to these subjects is that instruction in them shall be rationalized in the same way that the teaching of geography has been reformed during my recollection. I was not the boy who spent his first week in algebra trying to find out the value of x , but my most lasting recollections of the study of geography cluster around some cabalistic representations of the plane of the ecliptic.

To this day I am not perfectly clear about the meaning of those ghostly figures which lent weird interest to the earlier pages of the book. They produced in my youthful mind vague conceptions of uncanny gyrations among celestial bodies, presumed by the author to be the proper medium for introducing youth to a knowledge of the earth's surface. This is not intelligent correlation of whole and part. It is arbitrary creation of a whole to which the pupil's experience does not yet correspond. In another view it thrust upon the pupil's attention a part which he has not differentiated from the whole. I presume that every parent and every teacher who has liberty to use his own judgment now begins the teaching of geography with that spot of *terra firma* which is next to the home or the schoolhouse. Whether the plane of the ecliptic ever gets mentioned is a matter of very slight concern. A similar change in the social sciences is well in progress, but it is not yet a prevalent policy. At my graduation from college I passed a respectable examination on the constitution and by-laws of the government at Westminster, but I knew practically nothing, and was never told that it was worth while to know anything, about the government of the town in which the college was located. My knowledge of the British constitution has never yet found any practical application, but for a decade, as citizen and petty officeholder in that college community, I was obliged to study and use the town charter and ordinances, which were not worth the notice of my former instructors. Sociology, like charity, ought to begin at home; but, like charity, it ought not to stay at home. The rational method of observation, recognizing the real concentration of life around each

member of society, explores the concentric circles of social activity from the actual standpoint of the observer. The child should begin to study economics literally, — the law of the household, — he should learn the civics and ethics and history of the household, in the practice of normal household relations. The economy and politics and ethics and history of the school, and then of the parent's shop, and then of the neighboring factory, and later of the whole town, are the best educational material that the sociologist can recommend. In other words, the social *desideratum* is that the developing member of society shall become analytically and synthetically intelligent about the society to which he belongs. The precision of his social intelligence in general depends upon the exactness of his knowledge of details in the life which he most intimately shares.*

Observation of the structure, functions and forces of life in one's own community is the normal beginning of true and large social intelligence and action. Even history should begin with the present, not with the past. Just as Gibbon interpreted the tactics of the Roman legions by the knowledge he gained in the British militia, so every student of history is prepared to reconstruct the past only as he possesses correct and adequate conceptions of the present. Sociological analysis of the anatomy, physiology, and psychology of society furnishes the alphabet to spell out the lessons of history.

The only change in school methods which I am urging is the introduction of this laboratory study of the social facts, processes, and forces nearest at hand, as exhibiting typical social relations in all nations, times and places. This is not as a substitute for the present subjects in the social sciences, but as a method of approaching present subjects.

One more demand is urged by sociology upon pedagogy, viz.: that all direct or indirect observations of society shall be organized under at least three great categories: first, interdependence; second, order or co-operation; third, progress or continuity.† Unless social infor-

*Note. Small and Vincent's "Introduction to the Study of Society" is the first attempt to furnish a laboratory guide for this sort of study. It is not a text-book in sociology, but a pathmaker in methods of observing and arranging societary facts. Variations of the method are possible to fit different needs, from the kindergarten to the seminary. The University of Chicago Press has just issued a typical study of the City of Galesburg, upon this plan, an adaptation of the method of Schæffle, by Mr. A. W. Dunn. Such work can neither displace nor be displaced by another kind of work upon societary material, as represented, for example, by two recent text-books on sociology, Giddings' "Principles of Sociology," and Fairbanks' "Introduction to Sociology."

†I hope it is superfluous to add that the use of these terms, or of any verbal substitutes, is not what I am contending for, but the arrangement of ideas in conceptual form for which philosophers may find above designations convenient.

mation can be construed in at least these three forms nothing can save it from frivolity and barrenness. The categories are not logically exclusive,—the fault of the things themselves.

By the first category, interdependence, I mean the universal fact that every act or event in human life has been made possible or necessary by other acts or events connected with other lives both past and present, and that it helps to make or mar the lives of others. Beginning with the family, and extending to the compass of the race, society is a network of interdependences. One of the discoveries which pupils should be aided to make, in their study of any time or nation or human process, should be that the particular men concerned exemplified the truth "No man liveth unto himself."

By the second category, order or co-operation, I mean the machine-like interplay of actors and actions in every minute social group as well as in large societies. The relation is so clear that Mother Goose reported it genially, yet it is so obscure that society is daily dissipating its resources because the relation is not understood. From the factory whistle that rouses the workmen at five o'clock to the curfew bell at the close of day, the waking and the working and the resting of a town tell the truth of human welfare resting upon some form of established order. Wherever men have been associated, even in the most temporary society, the measure of stability in their relations has been preserved by an institutional order, as real while it lasted as though it were defined by the iron decrees of Medes and Persians. A mode of temporary equilibrium is one of the forms in which human association must be thought, if thought truly, whether in the society of Ivan the Terrible or of Grover the Inscrutable. When the learners read of any epoch of the past, one of the forms in which they must be helped to represent it, if it is to reveal truth to them, must be the reconstructed balance of influence and action in which the lives of that past time preserved their motion.

The biographical method of teaching history frequently violates this canon. Instead of being made to appear as one of the workers among whom the labor of their generation is divided, the great man, in whom the story of his age is told seems to fill a sphere apart from ordinary men, affecting their destinies by some undetermined process of long-distance induction.

By the third category, progress or continuity, I mean the conception of men and events as always working out new individual conditions and social arrangements, the truth, on the one hand, that "the roots of the present are deep in the past," on the other hand, that the present cannot escape responsibility for the future. When historical acts are recalled they should always be considered at last

in this third aspect. What motives and impulses led to them? What consequences and effects did they set in motion? This is the scientific attitude of mind toward the past. It is the genuinely social attitude toward the present and the future. It is the purely intellectual condition of the co-operative constructive temper which is the last and best product to be demanded of education. Yet I have known courses in history to be conducted under the highest institutional sanction, with no discernible reference to historical cause and consequence. Search and emphasis were entirely for the facts. Specialization of that sort is falsification. Facts cannot be told truly except in their relations.

Sociology demands of educators, finally, that they shall not rate themselves as leaders of children, but as makers of society. Sociology knows no means for the amelioration or reform of society more radical than those of which teachers hold the leverage. The teacher who realizes his social function will not be satisfied with passing children to the next grade. He will read his success only in the record of men and women who go from the school eager to explore wider and deeper these social relations, and zealous to do their part in making a better future. We are the dupes of faulty analysis if we imagine that schools can do much to promote social progress until they are motivated by this insight and this temper.

THE PUPIL AS A SOCIAL FACTOR.

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In presenting this paper I should like to inquire, first, what is there peculiar in the mind or character of a pupil or child, that makes him a social factor distinct from the adult; secondly, how does society try to take advantage of these peculiarities for the realization of its own purposes; and lastly, how does the pupil actually react upon society and affect it.

Anyone who has worked much with children must have been impressed with the fact that they are, in some of their views and activities, extreme radicals, in others extreme conservatives. These two tendencies are seldom mixed, but a child is a radical now, a conservative two minutes later, and a radical immediately afterwards. In children's traditional games we have an illustration of the way in which they cling to the form, even of words and jingles, long after all meaning has faded out of them. So the stories which they love must be repeated exactly, without the omission or change of a word, or the

child complains. On the other hand, in matters of ethics, sociology, and philosophy, the child is an extreme radical and pushes his logical conclusions to final consequences. The wise old grandfather may tell of the glories of the war and the greatness of Prince Eugene, — "But what good came of it at last?" quoth little Wilhelmine.

How can we explain this curious two-sidedness of the childish mind? A study of the history of civilization seems to show that there are three ways in which the race has achieved and in which we may achieve what we call knowledge. We may accept what we are told — authority; we may reason things out — rationalism, or, we may laboriously build up our knowledge by increments — experience. The Middle Ages rested in authority, the eleventh and twelfth centuries rested in logical processes, and we rest in experience.

Now, a child must at first rest in authority; his very preservation depends upon it; and if he is well trained he comes to feel the satisfaction of strong and secure support. A dogma in fields where he does not know — and there are few fields where he does know — is as restful to his eager, searching mind as his father's strong arms are to his body. The fact that his baby brother was brought in the night by a stork relieves his mind of its struggle to know — gives the blessed rest of belief, and sets the child's nature free for self-realization in other directions. So after an hour of unorganized play with his comrades, where he has been distracted and tired with all the conflicting impulses of the little group, the child turns with relief to "Here comes three drakes a-roving," and insists on its being played with perfect fidelity to every detail. This gives him balance, rest and freedom for self-realization in some special parts of his nature.

But there is in every child a natural tendency toward logical activity. As his muscles or his vocal organs tend to move in certain related series, so his mind tends to work in logical sequences; and just as the exercise of the body gives him pleasure, so the exercise of his mind produces a certain satisfaction. This activity certainly exists in children from a very early age, but various recent studies point to the age of ten to thirteen as the period of its great activity. Thus in a study of the theological beliefs expressed by a thousand California children, I found that they generally accepted what they were told without serious questions until about the age of ten or twelve, when they often indulged in such reasoning as, "Trees cannot grow without air; the air is only six miles thick around the earth. I can see six miles and I cannot see heaven, so heaven must be outside the air, so trees cannot grow in heaven and the bible must have made a mistake."

In my own experience I remember arguing with my father through the long winter evenings about the white men's right to this country. A thing belongs to the one who has it first; the Indians had America first, so the white men have no right here. I remember growing very much excited over this problem, and I felt that we were robbers. All history seemed to me a strange medley of wrongs because it followed neither authority nor logic. This logical tendency rises with most children to the highest philosophical questions. A little girl acquaintance eight years old said not long ago: "There are two things that puzzle me, who made God, and what comes after the end of time." Helen Keller raised the same questions, and all children reach out intellectually for the ultimate meanings of things.

As children pass into maturity they find that knowledge resting in authority does not fit the conditions of their own life. It is not up to date. The child also finds that the knowledge derived from pure logic does not fit a world filled with warring personalities; and so, for authority and rationalism, he gradually substitutes an eclectic half-knowledge which he calls experience. After a time the adult comes to find in this common sense, this experience, these half truths of expediency based in necessity, a certain rest and satisfaction. He is no longer either radical or conservative, — he is practical. He worships at the shrine of necessity. But against this practical world, this eclectic resultant of experience, the child is always in rebellion. He cannot understand how his father who so fiercely denounced Grant a month ago, can accept his presidency so calmly now that the election is passed. He cannot understand how the community can go on quietly about its business and allow an old money grinder who has a mortgage on a poor widow's farm to foreclose it and turn her into the street. He cannot understand how his mother can say it is wrong to lie and then say she is out when she is in. The enthusiast and the reformer are simply grown-up children who retain their earlier modes of thinking, according to authority or logic.

The child either accepts higher knowledge by direct gift or reasons out conclusions for himself. The hardened adult lays aside authority and doubts logic and simply accepts cold facts of experience. Who cannot recall his childish pains in adjusting his mind to the ill-fitting garments of experience?

With children as with adults, it is doubtless true that we are most conservative concerning things that are immediately related to our daily lives. Radicalism deals with distant things. The conservative Puritan New Englander was very radical concerning southern slavery, and eastern men are very radical or rational concerning the Chinese question in California. Intimate experience overbears logical reason-

ing, be it ever so perfect. On the other hand, little matters of everyday experience quickly become habits in our minds, and are little amenable to pure reason. Thus it comes that the child is a conservative in the matters of his own everyday life, and a rationalist, or radical, touching things more removed from his common life.

If this analysis is correct, the pupil as a social factor will be a conserver of forms in details touching his own life; and of beliefs in fields where he has no experience, providing these beliefs can be harmonized with the logical tendencies of his mind.

But in all matters touching the larger social life around him—where he has had little experience and where half-truths of expediency based in seeming necessity have come to prevail—he will prove an anarchist through the logical energy of his mind.

Now, how does society take advantage of these peculiarities in the child's subjective life? The attitude of society toward children or pupils will always be determined by what society wants done, and by its theories concerning the nature of childhood. Society says: What is the nature of this new creature, this on-coming generation of children, and what do we want it to do? The chief function of society is to carry along, protect, and develop a man of accumulations which it calls civilization. To society this civilization is the Ark of the Covenant which must be maintained with the most sacred care. It is the foundation of existence, and if this civilization were disturbed society believes it would straightway perish. Hence, society from the point of view of what it wants done must train each on-coming generation of children to carry this civilization along gently and undisturbed. To accomplish this, society loads the minds of children with authoritative beliefs, frightens down or leads astray their logical activities, and makes them suspicious of experience.

The tendency of children to seek self-organization and freedom through relegating the little details of life to forms and habits has been eagerly seized upon by society and used to form the mind and character in authoritative molds. Thus all partly civilized people make the ceremonial of daily and religious life the basis of education. The Aztecs or the Chinese well illustrate this. They teach the child how to behave toward his parent, his teacher, his neighbor, his king, his priest, and his mental energy is so absorbed and used up in this ceremonial exercise that the logical faculties never awaken, and the voice of experience is drowned. The child, decked out in the ceremonial of life, becomes a safe servant to bear the civilization of the past.

Attempts have been made to accomplish the same results by seizing boldly on the radical tendencies of youth and leading the logical

powers out along lines where they would do no harm, with a view to ultimately using these powers in the service of supporting the old civilization. The Jesuits tried this, but such men as Descartes escaped from the most skillful leading and brought disaster to the burden of ideas society was trying to protect. The Russian government, through its support of universities, is trying the same dangerous experiment today, and she is sure to destroy herself. The only safe way for society to protect her civilization unchanged from this ever new force of childhood is to seize the natural tendency toward conservatism in the small matters of daily life and smother logic and experience under a burden of forms.

Within these last generations many prophets have arisen who have maintained that children could be safely developed on all sides of their natures, but practically almost no one believes it. The church, the state, societies and individuals—all use the school to teach monarchy, republicanism, American patriotism, German patriotism, French patriotism, catholicism, protestantism, temperance, or whatever other beliefs it is felt ought to dominate those who are to uphold civilization.

In the last place let us inquire what is the actual effect of the pupil upon society. Biologists often raise the question whether the human animal can be modified fast enough so that he can maintain the accumulating and rapidly developing mass of civilization which he is trying to carry today. Our hope in this direction lies with children. Each new generation must start afresh and in taking upon itself the accumulated burden it tends to drop those parts which experience shows that the passing generation found too heavy. The results of our studies of hygiene, or ethics, or art, are applied primarily to pupils. The old smoker is allowed to smoke, but the child must be protected. The father who has had a childhood of toil tries to give his son a more leisurely youth. And so in a thousand ways, each generation that passes tries to give to the on-coming generation a more reasonable load of civilization than it has carried—and here lies the hope that biological adjustment may keep pace with advance in civilization.

At the same time, this constant return to purely logical activity with each new generation keeps the world supplied with visionaries and reformers—that is to say, with saviors and leaders. New movements are born in young minds, and lack of experience enables youths to eternally recall civilization to sound bases. If each generation started where the last one left off, imagine where Lord Chesterfield's sons would have been today. The passing generation smiles and cracks its weatherworn jokes about youthful effusions on commence-

ment days, but this ever-new, ever-hopeful, ever-daring, ever-doing youthful enthusiasm, ever returning to the logical bases of religion, ethics, politics, business, art, and social life—these are the salvation of the world. And this salvation must be wrought over by each new generation.

The influence exerted by the pupil upon society is not to be sought alone in the fact that the pupils are the coming generation and that when they are grown they will be society—but the pupils have at once and immediately a profound influence. The father and mother, inclined to sink into mere time-servers following lives their experiences have taught them to be safe, are constantly shocked into new life and new action by the radical views naturally presented by the children less bound in by experience than they are themselves.

Then, too, all that is newest in the schools in religion, in social and political thought, in literature and art, is brought home and given to the parents through immediate contact. If my immediate problem were to educate the adult population of the United States I should approach the people through their children. The man of business who would scoff at religious, artistic, or ethical ideas presented by an adult listens with sympathy and respect to the same ideas presented by his child. The very efforts he makes to avoid robbing his child of what he may consider childish enthusiasms lays him open to the influence of these same enthusiasms.

And so the pupil with his tendency to preserve the little forms and ceremonies of daily life, and to go ever back to logical sources for his beliefs in the larger fields, is preyed upon by society which wishes to form and shape and mold him to be the preserver of what it considers of transcendent value.

In China, society succeeds and civilization stands still. With our larger freedom the child throws off some part of the useless burden, expresses anew the external ideals of life and even reacts upon the adult so as to retard his hastening decadence, and civilization advances steadily onward. With increasing freedom in the study of realities, and in living schools our pupils will bring us still larger life with the birth of each new generation.

DISCUSSION.

HON. J. M. HARPER, INSPECTOR OF SUPERIOR SCHOOLS, QUEBEC, CANADA.

In these days there have come to be so many ways of looking at things that one has to be careful in making his selection of a direction in which to look; and this possibility of bewilderment is perhaps becoming as imminent in our educational investigations as in any other investigations.

The teacher, in his novitiate, when he thinks to deal with the being of the child as a unit, finds no difficulty, at least often imagines there is no difficulty, in laying down a simple basis for his operations in school work. The beginning and end of school work is the improvement of the child's mind, the storing up of knowledge, the refurbishing and furnishing of the memory; and the method which secures this along the lines of the least possible resistance is the only true method. Is there anything more simple as a science than this? Is there anything in any art so easy to get at as such a pedagogy?

Even when there comes to the young teacher the revelation of the trinity in himself and in each of his pupils, when he becomes convinced of the wider scope his pedagogy must take, he is still able to circumscribe for himself a simple basis for his professional operations, for his practical investigations of child nature. The body, the mind, and the ego, and their inter-relationships, have been the theme of all educationists—a simple theme in itself—and, as the young teacher used to think, one easy to be understood as a safe guidance in school work. But is it not a fact that so widely—I was almost going to say so wildly—have we continued to discuss this same trinity and its relationships, that our teachers are beginning to beseech us to simplify rather than amplify our pedagogic disquisitions. In a word, the query that stares us in the face at a convention such as this is to be found in the cry of the young teacher: Has the science of education in these later times come to be the endless chain of the seer; is there any limit to the sphere of its theories; are we ever to find rest for the soles of our feet?

The discussion which the preceding papers are likely to provoke brings to my mind an article I once wrote, in which an endeavor was made to strike an analogy between society as an organism and the tripartite being of the child. The steam-engine, taken as an exponent of the manufacturing arts and physical comfort-promoters of the times, indicates in its effects the marvelous physical development of the world, just as the printing press may be taken as an exponent of intellectual progress, or just as the Christian religion may be considered as the highest type of the moral forces that are guiding mankind towards a higher ground of right doing. As the pupil has to be subjected to his three drills—body drill, mind drill, and soul drill—in order to secure for him an even development of his whole being, so has the world or society been subjected to three great social forces or processes, to bring about its nineteenth century development. In this sense, God stands as the first of schoolmasters, our Great Ensampler.

Education means the fullest development of the whole being of man. As a branch science of sociology the *scientia scientiarum*, its history may be likened to the history of science itself. Science had its birth in the investigation of the physical, or the fixing of a Cosmology, when men, surprised to find that a fish had weight in water as out of water, though a king thought for the moment to declare otherwise, began to run away from a faith-reading of the spheres; and education

as an *ology* had its beginnings in the mere physical arrangements by means of which the old pedagogue was said to run a tidy school with a moderating use of the thong. But refusing to stop short its identifications of natural law in the physical constitution of things, while tabulating them in the sub-sciences of physics, chemistry, geology, astronomy, Science saw man himself and his environment affected by the forces of heat, light, and electricity, and finding in these the evolvers from a lower to a higher condition of life, from the jellyfish to the kings of men, laid the foundation lines of a new branch of science and called it Biology; and so in the same way, education, having tarried for long near the outs and ins of empiric methods, came to discern its foundation lines in the "new education," in the psychology that was ready to father the true pedagogy, and took to indentifying the natural laws that affect the mind on its way from a lower to a higher activity. With cosmology as a classifying knowledge of the world in its physical aspects and with biology as a knowledge of the laws of nature found in the activities of its vital order, science had to take a further step in advance when it came to see that the present was but a developed or the past an undeveloped future, when it came to detect the laws within us and without us but not of us, that are said to work for righteousness; and that step, it is needless to say, was the movement in favor of the "new philosophy" that fathers the science of sociology.

In these three great families of sub-sciences, cosmology, biology, and sociology, we have the right-hand terms of a second striking analogy between the developing stages of the world's knowledge, and the developing stages of the sub-science of education. And as sociology may be looked upon as the crowning glory of all science, in which the function of the individual is identified as the issue of a natural law, co-ordinating with the other social energies in the environment, so may the moral value of the individual be considered the most seriously important of the problems the educationist has ever been called upon to consider. Sociology is the science of the sciences, including cosmology, and biology, just as character-building includes physical culture and mind development. The close interrelationship is undeniable in both cases. A sound mind in a sound body is a necessary part of moral responsibility. The three go hand in hand. *Mens sana in sano corpore* is a good enough adage to force us to keep always in view the necessity for physical culture in school, be it vocal drill or calisthenics. And as I have another adage, with a reform twinge about it to guide me in the right, while working for an improved mental activity in the young, namely, "It is not that which goeth into the child's mind that educates, but the manner of its coming out," so have I, while seeking to raise the standard of school morals, urged upon all, "to follow the argument, (that is, the right of it) wherever it will lead." These three adages I would inscribe on every teacher's heart and soul. They embody the all and the be-all of education. A great principle in each, they are the three greatest of all principles ever laid down in the hearing of teachers. Repeat them to yourselves, repeat them to others, repeat them everywhere, until you feel as if you were guilty of mortal sin in not having at work the best of plans, invented or borrowed, to mature through school work the value of the individual, physically, intellectually and morally.

It is with the moral aspect of education that I am personally most seriously engrossed at the present. I have been doing my best to introduce into the schools down our way a series of school exercises or drills that have for their object an improved physical and intellectual development among the children, and it is my intention, with the co-operation of my teachers, to introduce this coming year some definite processes for improvement in applied school ethics. There is not

a boy or girl in our schools who has not to learn the Ten Commandments and the precepts of the Sermon on the Mount. Our schools are neither separate, sectarian, nor godless. They are public schools in which the Bible is read and studied as the best of all moral codes. Hence our boys and girls are expected to learn by heart large portions of the sacred volume. They are expected to know the Ten Commandments thoroughly and the prominent precepts of the Christian religion as well. And yet I do not know that the standard of our morality is any higher than it is elsewhere. Down our way, just as over your way, we have men who have been to school who worship the mammon of unrighteousness just as sedulously as their forefathers worshiped the only living and true God, who bow down in their whole being before the idols of some palatial way of living, who swear like troopers; who fish on Sunday, who worry some poor unfortunate creditor of theirs to the death; who joke over the sacredness of the marriage vow and in worse ways show their disrespect of it, who take advantage of their neighbor every time, and laugh over their own smartness in doing so; who daily utter falsehoods more hideous than those of Ananias or Baron Munchausen, and who are as full of jealousies and all manner of unsavory prejudices as a neglected egg is full of noisomeness. They know that Christ said "an eye for an eye" ought to have no place in a civilized world, and yet "tit for tat" is one of the first principles of their lives. They know that the keynote of Christ's message was and is "Love your enemies," and yet they continue to be better haters than Philip II. or Bluebeard. Nor are these people tabooed by society. They are respectable people. They are invited out everywhere. The governor-general complacently receives them, and the *elite* drink tea with them. They are not moral by any means. Indeed they make no pretensions to religion, or even a mediocre morality, beyond going to church on Sunday or sending a female proxy. What does it matter to them whether a man's soul is nasty or nice as long as its outward adhesion to the respectabilities of society is all that society demands? No, they are not moral, though they have been to school. But they are intelligent. They are heirs to wealth through birth or marriage, or they have succeeded in their tradings. No, they are not all politicians, though many of them are possessed of even less than a moiety of the morals required for that professional way of living. They are not even the heathen at home. They have been to school. They have had a moral training in school, and now all that we can say of them is that they are sociological forces at play with other sociological forces. Whether for good or bad we know each has his value; and it is for us as educationists to find out what that value is, in order that we may put some estimate on the moral training given to them while at school, to find out how it works for good or bad, and how it may be revised or revived, how it may be converted into a means toward an end—the end being the enhancing of the value of the individual in the economy of nature. This enhancing of values is the legitimate work of education, and applied school ethics is the force that will bring about the enhancement. In a word, as far as education has to do with sociology as one of its sub-sciences, its work is to define the maximum value of the individual, and to formulate and foster methods that will raise the citizen to the highest ethical standard of communal worth.

I do not think that the individual as a force co-ordinating with other social forces can ever work only for good. Sociology teaches us that, of necessity, that is not the way of the world. Good and evil are necessary to the sociological order of things, the world assimilating the one and excreting the other. The maximum value of the individual is therefore variable. There is no mathematical certainty about it. And this arises as much from the within as the without

of the man. As a creature of circumstances, with himself as one of them, his function is not always at its fullest tension for good or for evil. A man is neither all bad, nor can he be all good. The conscience grows by absorption, and so does the tree, but a maple is not a beech nor is a birch an oak. There is within every living organism an individualizing force, a force within us and not of us that makes for righteousness, that makes for good or evil, for growth or decay, for beauty or rottenness in all that we see around us; and we teachers and educationists are ever longing to lay hands on this nucleotic force, eager to fashion in our own way this fashioner of fate, notwithstanding the lion in the way. Which came first, the egg or the bird? Answer me, and I will tell you which came first, man or his environment. And when we see society saturated with so many false beliefs, when we see a false coin examined so scrupulously and an unworthy opinion allowed to go scot-free on its way of evil, when we see the lesser logic hurrahed over, while the groundwork of the truth of things is only listlessly thought of, the task of discovering the general solvent of ethics becomes the task of the alchemist when science was in its babyhood.

Is it a natural law that men for the most part love the things they ought to hate? Is the doing of things we ought not to do and the leaving undone things we ought to have done a fixed decree necessary for the safety of society? Is it a sociological principle that people should so seldom make the most of their mind and moral energies? Is there none good? No not one, and why? Does wrongdoing always hurt some one? Does right doing ever hurt any one? Does the leaven of good leaven more than the leaven of evil? What is moral force? Is there a conservation of moral energy as there is a conservation of physical energy? What is a belief? Is it a cause or an effect? What is a dogma? Is it a product or a creator? What is a motive? Is it primary or derived? These are problems, sociological problems, which the "new education" has to investigate with fear and trembling.

Why is that girl of a pouting temperament? Have you seen her mother? Why is that boy so stupid or evil-disposed? Have you seen his father? Why is this school worse to manage than another? Have you any knowledge of the community? Have you seen the homes of your pupils? Have you met the fathers and mothers at church and market? The law of heredity lurks in every one of these queries, and the teacher who knows not how to come into close quarters with that law, to wrestle with it as part and parcel of the law within, working in the individual for good and evil, has not yet learned the alphabet of his calling, knows nothing of education as a branch of sociology. As the whole duty of man is to love one another, so the whole duty of the teacher is to enhance the value of the individual, with all the elements of the environment in hand, during the process of school training—in other words, to train up the child, by example and precept, to lead a clean life.

And let us be careful to know this which John Tyndall has said in the true spirit of the truth-seeker: Facts rather than dogmas have been the ministers of human development, hunger and thirst, heat and cold, pleasure and pain, fervor, sympathy, shame, pride, love, hate, terror, awe,—such were the forces whose interaction and adjustment throughout an unmeasurable past wove the triplex web of man's physical, intellectual, and moral nature, and such are the forces that will be effectual to the end."

DR. G. STANLEY HALL, President of Clark University, Worcester, Mass.—If anything can give a modicum of poise and consolation to the Secretary and your President, who asks me to attempt to assist in closing this discussion, it

is the glimpse of the transcendent peace that always comes to me when I know that I am to be followed by the great moderator of my sentences, the alkali for all my acids, my honored friend, Dr. Harris.

Sociology has had a marvelous development in this country within the last few years, and you could hardly have listened to men who have done more to define what I believe to be the true lines of sociology than the two gentlemen who introduced the first two papers. A striking illustration of the growth of sociology was furnished lately in an incident related to me of a famous geologist. He was just concluding a long survey in the far West. Although warned that he had better get out quick, for the Indians in that locality were getting hostile and were sure within a very few days to make an attack, he nevertheless persisted in staying a day or two too long. The very last day, as he sat alone in his tent, having sent out his servant, he was startled by looking up and seeing in the doorway of his tent, a young Indian brave, majestic, with his war paint, with his tomahawk in one hand, and a mighty club in the other. The Indian stood still, and Mr. King, knowing that was his only safety, kept perfectly quiet, and they remained eyeing each other for half a minute. At last the silence was broken, and the Indian brave said in accents which King said he never should forget, "Can you tell me where I can get the latest edition of Mulford's 'Commonwealth of God?'" He was a graduate of Yale, but had gone back to his tribal relations. It is a marvelous growth, this development of sociology.

I think the relations between sociology and psychology are getting now extremely close, as you have seen from these papers, and also extremely profitable for both. I hardly know which has been benefited or is likely to benefit the most from this conjunction. The fact that the biological alone, or at least I call it so, which began perhaps with Lillianfeld long ago and is represented at the present time by Professor Small, and so well represented now by the very latest book of Giddings of Columbia. That movement which is so distinct and transforming, places the subject on a surer foundation than ever before, and we are amazed at the relation between psychology and sociology. I do not exactly know where the one ends and the other begins. In fact their relation is, perhaps, well illustrated by a fact that occurred in my own town of Worcester, Massachusetts. During last winter a mother and her married daughter, who lived in the same house, both had babies born the same day and at almost the same hour. They were by some inadvertence placed upon a bed in a room together, and in some manner left in the room, and those babies got mixed up, and now nobody can tell which is the aunt and which is the niece. That is the condition between individualism and sociology—altruism, I should say. It seems to me it has often been wrongly placed. The history of civilization and a history of this science shows that sometimes individualism has been accented, over-accented, and then the altruistic, socialistic side has been over-accented. Then the sociological phase has been carried down even to limit the free development of childhood. But I think we are now, owing to this true basis which has been reached, arriving at a more healthful equipoise, where each great subject shall receive its just due. And the point of union, in my opinion, or at least from a psychological aspect of these two great sciences, is to be formed in the development of adolescence. It is but a few years since we began to study this strange phenomenon. We now know it is a period of second birth, physiologically and psychologically. We know that during this transforming epoch from thirteen, fourteen on to sixteen and seventeen years of age—and indeed adolescent ferment is not complete until well on to twenty or more, or at least a man isn't fully

nubile before thirty, some at twenty-six and twenty-eight perhaps. But the latest information is that ferment goes on along to this time; and the significance of it all is that it is the birth of love in the largest Christian sense, psychologically free from all selfish motives. And the development of that is, I believe, the true philosophy, or the true psychology, in education, and as educators we have come to learn the appalling fact that we have no philosophy in education. I believe that we have the germs of a philosophy of education, and that, I believe, I can make plain to you in two minutes or three at the most, and before I sit down. The main outlines of it are that in the history of education, in all countries, everywhere, among savages and civilized races, education begins in the consecration, rites and ceremonies, in early adolescence, to puberty. The crucial importance of that period has always been felt. There is no savage tribe in this country, and none of the savage tribes in other parts of the world that do not bring the most solemn and consecrating influence of the older to bear upon the younger generation during these critical years. The new philosophy of education is that mankind, with one accord, has felt that the birth and development of this great function of altruism, and love of others,—whatever you call it, that is the central thing,—that at this period of adolescence men are vulnerable to all kinds of temptation, and that the older generation must at this time give the younger its most consummate care. Civilizations are judged and weighed by nothing so crucial as by the way they have treated adolescence. The Greeks carefully watched the young on entering this period. The Romans developed the natural pugnacity and initiated the youth into the secrets of war, and the Persians appealed to this age with great expectations. So the modern church—this is the time when the Greek church, the Catholic church, the Lutheran church, the Episcopal church, confirm. And it is the time when statistics show that most conversions are had among those denominations that believe in conversions. The reason of it is because it is the time when the soul grows most and fastest. It is the time when men's and women's sympathies reverberate the widest. It is the time when the heart pours its rich transforming flood through the body. Biologically, this period consists simply in this: Whereas, before, the child has been selfish, and the normal child has perhaps inherited physical and mental traits from the father or mother, or perhaps one or two grandparents, at this critical period the floodgates that connect him with the past are down, and all the seven rudimental organs of the body and more of the soul, are most active. You know we all have two parents, four grandparents, eight great-grandparents, and if you figure it back to the time of William the Conqueror, you will find we have something like twenty-three million ancestors. This is a very great supply from which to draw an inheritance at this period. That is why the individual is susceptible of culture and development at this period. It is the natural dawn of the educational instinct, the culmination of religious and parental care which alike develops slowly upward toward the university, as civilization advances, and slowly down toward the kindergarten, as civilization advances. This gradual development is best measured I know, by civilization. There is one important factor which I must mention here before I sit down, because it has an important bearing upon altruism and upon sociological study, and that is this,—the laws of biology show that whenever two ancestors, two parents, are pretty nearly alike in organism, this period is short and brief; but when the parents are from a different line of stocks, when they differ widely, as they do in this country, yet not too widely, then this period of adolescence is very greatly prolonged, and the consummation of body and soul is more uncertain. For instance, pure stocks, like the Germans, have a very different history for this period than mixed races—I was going to say mongrel—

like some American stock, where very often blood from different races unites in an individual, from the father and mother. That heterogeneous condition causes this period to grow immensely. You know that man has the longest period of immaturity, in comparison with the total period of life of any known animal, with one exception. Alongside of that great doctrine which is so important in all its educational implications I now place this which is just as great, if not greater, that just in proportion as civilization advances, and new ideas come in from all sources, and as there comes this mixture of blood, it all means that this second infancy, adolescence, is prolonged to an uncertain time, and must receive consummate care. With the mixed blood there are infinite possibilities for manhood and womanhood, and these possibilities are infinitely extended, and in this lies the hope of America. There is no country in the world where so many diseases, moral and physical, prey upon the young adolescent as in this country. No country where there are so many forms of mental and physical arrest as here; but there is no stock of blood in any country in the world where, when these dangers are avoided and complete immunity is attained, manhood and womanhood is so perfect as in this land. This perfection consists in love, or, as I said, the adolescent period consists in self-sacrifice, in an instinctive subordination. The true education will transform the old selfishness into an ardent self-sacrifice, and you will find that the spirit of altruism will be just as deep and strong with those who have passed the meridian of life as the instinct of selfishness was before. So while sociologically imitation should come late, as I believe Professor Small thought, it should be preceded by a long period of complete individual development. Then the ground is prepared, and not until then is the individual ready for this higher superstructure which makes man Christlike.

DR. WILLIAM T. HARRIS, United States Commissioner of Education. — It has been a motto of my theory of education for a great many years, that education is founded on sociology, and for a convenient definition or synonym of sociology I say, "Sociology is the science of civilization; the science of a combination of men into social wholes." We have the civil society combined for the supply of human wants, and the equalizing of ages, sex, and strength in locality. We have the city social whole that exists for itself and endows the individual with freedom and a larger knowledge, and thus comes enlightenment to the individual. We have these great societies over us, and education comes in that which takes the child, the youth, and places his hands in the hand of the great social whole, and thus is he led towards his fruition. So that each individual shall reap what the whole produces, and each individual shall place in the hands of the whole his small infinitesimal product. This brings us to the point of the question of freedom. If the individual exists for the social whole alone, and is not endowed with the beneficence of the whole, we have slavery. When we look at the individual as receiving the gift of the whole, and the whole handing to it what all has produced, we have freedom. This brings us to the point that education occupies in that large school. Education there, is for the emancipation of the individual, the prevention of his being swallowed up by great substances of the social whole. Loose organizations, loose forms, do swallow up the individual. The individual never attains to separate independence and free existence; never feels that the whole exists for him, so that he uses the whole as his instrument, by which to gain possession of the world. Education, I say, makes free.

And the special topic which your president asked me to speak on this morning is the teacher as a social factor; the teacher as an element in the social whole. I say as education relates to the making free, so the teacher has the finest

opportunity of any person in the community, with the exception of the clergyman, to bring about the fruition of this highest relation of the individual to the social whole. Speaking of clergymen, we have in New York Bishop Vincent, a man who has shown us what the clergyman is as a factor in the social whole, as a factor making for freedom of the individual, looking abroad and seeing the individual in society stop growing after his little turn at school, perhaps in the elementary school only. In considering the possibilities of the individual for growth, in helping the individual find out where he is and what his possibilities are, in stimulating him to attempt to do something that will help towards making him wiser, in encouraging a study of books, in carrying out this most ingenious and effective system, this clergyman has accomplished a great deal. It is a field that can be occupied by the teacher, for the teacher has children passing through his hands all the time. The children come from the families into his hands and begin to learn letters and symbols of communication, the symbols by which he may participate in the wisdom of the race and render himself able to take possession of what the social whole hands to him in a free manner. He has these children passing through his hands, as I say, going on into society. What is so easy for the teacher, even in the most elementary schools, as to keep some sort of inventory of these pupils, their tastes and habits, and to look after their reading afterwards. What is so easy for the teacher, who must, in all true culture, be growing himself. He is never fit to be a teacher unless he grows, continually grows, grows on towards new freedom away from his environment. Education, the getting an insight into these things, frees and emancipates us; and this great movement of child study of which you have heard, is now growing into a constitutional whole. That great movement looks towards finding out new methods by which the individual can be brought into this great social whole, which acts like a substance, swallows him up, so that he may become a distinctive part of the social whole. The great movement is towards freedom, towards emancipation of the child. Emancipation and freedom lie along that line of study. Without the study of sociology you would not have your ideas, you would not see what this tendency towards freedom is. Child-study is not a substitute for sociology, and sociology is not a substitute for child-study. Sociology helps us to find what the individual is. He is at his highest when he finds institutions, when he takes hold cheerfully and humbly at the lowest round of an institution and works in it and allows himself to be absorbed in it, holding his freedom and, through his insight and his interest in the great work as a whole, feeling the spirit in it. Every step of civilization teaches us this lesson. From Plutarch we learn what there is of the human will; from the history of religion we see what the great religious leaders have done in the way of emancipating whole peoples, in spite of all the influences dragging them down. Every state in civil society, every stage of civilization has formed and is forming for each of these institutions, a civil society. The lower forms of religion work against the higher forms of religion so much that in looking back into the history of Christianity, we find how the Christian church has moved along from a lower to a higher plane, and produced its influence upon the governments with which it came in contact. The history of the development of people into institutions and the gradual growing of a freedom in those institutions, the application of the sciences, the conquest of nature,—all these things belong to the state, to society, to the social whole. We get our ideals from them. After we have our ideals, without child-study we force them upon the child. We do not utilize these things to the development of his freedom and we leave him a stunted individual. We leave him, as it were, a sort of civilized automaton, which is not very flattering to civilization. But child-study takes an

inventory of the child. Some look back into history to find a pattern, to see if they cannot find a Moses who will lead the people out of the bondage of Egypt. They can find Platos and Aristotles. But in the child there is a field for intelligent study and great culture. The true pursuit of child-study will give us higher and better institutions and a higher and better civilization.

I say that the teacher has the finest opportunity to elevate, by his profession, the women and men engaged in teaching; to lift his profession up to the point where it will be recognized as a profession, through this study of sociology; through this study of how to bring the child rationally to this point, and through special investigation into art and literature, and science and philosophy. Take the youth after they have left school and interest them, as young mothers and fathers, in keeping up their study of the great works of natural and revealed science and religion. They can make life where they live by studying these things; and sooner or later, to the teacher and the pupil so instructed, life will come to have a new meaning and be well worth the living, when they find that they can grow into these great things; and soon the time will come when the teacher's profession will be recognized in the community.

COUNTRY SCHOOLS AND COUNTRY ROADS.

BY ROY STONE, UNITED STATES ENGINEER.

We come to you for help in a work which appeals to the teachers of America from the standpoint of every interest in the land—moral, intellectual, and social, as well as material. A southern editor states it perfectly when he says: "Every mile of good road built in the country will increase values, improve morals, elevate citizenship, stimulate trade, beautify the country, promote education, raise the standard of religion, and add to the wealth, health, and happiness of the people." We do not come to you, however, for help till we have put our own shoulders to the wheel. Four years ago a few of us organized at Chicago the National League for Good Roads, and spent \$10,000 in hard-raised money to begin our campaign. Before that was gone we had gained the ear of congress, and we have had a little national aid for our work ever since. We found ahead of us in the field, active, untiring and efficient, that splendid body of young men, the League of American Wheelmen. We have worked with them and they with us ever since, and today we have the country so roused to the need of better roads that we may safely say to you that if you will throw the weight of your powerful organization and the ubiquitous influence of your personal leadership into this movement, we can promise you a success that will not only be grand in itself but will advance every other feature of your noble work. I will not waste your time nor mine in arguing for good roads; what you do not know about bad roads is not worth the telling. I will come at once to the question which I trust is

on all your lips: "How can we help?" There are three ways in which you can help individually.

1. You can preach the "gospel of good roads" and carry the glad tidings that already in America, in many places in America, and in the most unpromising places, that gospel has borne fruit, and the people are even now enjoying its blessings. If any of you will take up this work we can furnish you with chapter and verse for your sermons, and applications and illustrations without number. I will give you one topic to carry home with you.

The cost of bad roads in the United States has been variously estimated by competent authorities and the lowest estimate of the bad-roads tax, that of Professor Latta of Purdue University, collated from the certified experience of practical farmers in forty counties of Indiana, amounts to 77 cents per acre annually, or \$500 per square mile of farm area, and there are 1,000,000 square miles of farm area in the United States: \$500,000,000, or three times the cost of all the common schools in the country, utterly wasted. What could not be done for education if this vast sum could be saved!

2. Not only can you preach good roads but you can teach a little road building in all your schools. No knowledge would be more valuable; it would be taken home from school and discussed in every family. It is a practical concern of everyday life, and will interest parents as well as children, women as well as men; attention will be called to every defect in the location, construction, and care of the roads directly about you. You will need no text-books, for no high-class technical knowledge is necessary to teach the rudiments of road construction and repair. We can furnish you from Washington with our printed circulars giving all the information you will need to impart; and if any of your pupils desire to go beyond the stage of primary instruction in this matter, it will not be long before the higher schools, and especially the agricultural colleges, will be teaching road building in all their higher departments.

3. But better than teaching and preaching, you can do much to actually improve the roads of the country. The great need of our country roads is daily care. For want of that care a trifling depression which a shovel full of gravel would fill, fills with water instead, and deepens, widens, and lengthens with every wheel that dips into it till it becomes an impassable mud hole. For want of that care when a rain storm comes a little stream of water which the stroke of a hoe would turn aside, follows the wagon track down a long incline, grows into a torrent, and makes a dangerous gully or a stony hill face; for want of care and a little work loose stones accumulate in the wagon way and stay there till the annual season of road repair, while fast

ones grow out of the ground apace for want of a hammer stroke to knock off the first point that shows; weeds and rubbish choke the ditches and sluiceways, and costly washouts occur, or standing water soaks the roadbed and turns it into a quagmire.

In the absence of care every defect grows by geometrical progression; the worse it gets the faster it grows. \$40,000,000 we spend every year on road repairs and make the roads no better. We roll the great stone up the mountain with 40,000,000 days' work, and then we let it go to the bottom to be rolled up again next year. What is the cure for this state of things? The trouble itself is nothing new. Every thinking farmer knows it of old and has puzzled his brain for a remedy. The daily care of all the roads by paid laborers would be a tax absolutely unbearable; the travel to and fro to do the little work required would cost ten times as much as the work itself. What, then, can we do? When you have interested parents in your district in the subject of road-improvement, and taught your scholars something of the proper methods of carrying it on, why not take advantage of the fact that all your roads are traveled twice a day by boys old enough to take the ordinary daily care of them if they have the means to do it? Why not organize your own road-leagues among the older boys and persuade your township road authorities to supply each league with a few light tools to be kept at the schoolhouse and carried home when needed for road repairs, or used at recess on the roads near the schoolhouse? And why not persuade these authorities to offer a prize for that school district which does the best work in this direction? The effect of daily care would show so promptly in preventing the deterioration of the roads after each annual season of repairs as to offer great encouragement for the general betterment of the highways, and by these means you will not only be conferring an instant and visible benefit upon every resident in your district, but you will be training up a generation of better road builders for the future.

So much you can do individually. Collectively, if your powerful organization will interest itself in this subject, make it one of its active departments in connection with rural schools, put some of your best workers at the head of it, and, finally, co-operate heartily with all the state and local road-improvement organizations, the League of American Wheelmen and the work of the general government, you may have the satisfaction of helping to raise country life in America to a level of comfort, happiness, and prosperity with that of the old world where good roads prevail.

THE GENERAL GOVERNMENT AND POPULAR EDUCATION.

BY PRESIDENT ANDREW S. DRAPER, UNIVERSITY OF ILLINOIS.

No one can rightfully say that we have not a very great system for extending popular education in the United States. But surely it is a very unsystematic system. It is thoroughly characteristic of a youthful but great people. It is the product of pioneers whose numerical increase has been phenomenal, whose energy has been intense, whose ambition for self-improvement has been exceptional, and whose rapid development of general, quick-wittedness and institutional life has challenged the admiration of the world's intelligence. The system was not imported. Of course popular action in the New World was influenced by popular thought acquired and popular customs established in the Old World, but the contacts between many people of different nationalities and widely opposed traditions, opinions and habits, soon evolved new life which did not long hesitate to defy the thought and the customs which had been brought from over the sea. The system was not erected upon a preconceived plan. It has grown as the towns have grown. It has reached out as the states have acted upon the theories which must underlie government by the common suffrage. It has now come to be a universal system, but it has everywhere partaken of the habits of mind and the manner of life peculiar to the different sections.

The greatest conservatism is found in the Far East. New England started with the fundamental ideas which had become common in Old England. They were truly great ideas which had already made a profound impression upon world history, and which were bound to make a no less profound impression upon the history of the new world. Her Calvinistic faith, her inbred regard for constitutional rights, and her promptness in setting up colleges and preparatory schools for the purposes of the church and state, according to the English plan, qualified her for leadership in the evolution of a new nation, insured her a well-ordered life, and enriched her with a wealth of culture which is everywhere recognized and of which all Americans are exceedingly proud. The common run of English thought upon matters educational, irresistible at that early day and lasting until the present with continually weakening force, coupled with the prejudices of the Puritan fathers against Baptists, papists, and all others who were not of their religious faith, made her a little slow in starting elementary

schools common to all. Her idolatrous worship of the idea of government by town meeting, and her contention with revolutionary stoicism that the public school is purely a local institution, that teachers must be examined, certificated and superintended, as well as employed, by a single authority — a committee chosen at random from the voters of the town — puts her at variance with the doctrines of the American public school system, which are everywhere else universally accepted; and the great cosmopolitan population which she has acquired within the present generation seems to be putting her at variance with herself. But the potent influence of her many institutions of higher learning, the frequency and the temerity with which she ascends the mountain top and lays claim to all the glories of history, the grace with which she embellishes and the patriotic glow with which she intensifies her story, all combine to afford her sufficient security while she gradually and artistically adjusts her old theories to her new conditions.

If two heads are better than one in determining a wise course of action, so two nationalities co-operating together are better than one in deciding the trend of national life. New York plainly shows the Dutch as well as the English influences upon her educational career. The former were stronger than the latter, until after the Revolution at least, and they were very much more democratic. The reasons for this are historic and easily traced. If the English had a stronger conception of national unity and a stronger sense of constitutional organization, the Dutch had a deeper love of religious freedom, quicker appreciation of the rights of the individual, and a readier grasp upon the doctrine of universal popular education. This fact gave rise upon her soil to the first elementary schools in America, supported at the common expense, managed by common authority, and free to all. But it did very much more than this. It combined with English thought, soon after the attainment of statehood, to make the first *state* school organization in the new world. It was not only the first, but it is the most-comprehensive and the best state school organization in the country. The position of the state superintendent is authoritative, and it gives him the right of leadership and, if necessary, the right of direction. A very general and complete system of teachers' training classes in the secondary schools, a magnificent dozen of purely professional normal schools, teachers' institutes under a continuously employed corps of conductors, a well organized system, uniform throughout the state, of examinations for teacher's certificates — all these things supporting each other under the direction of a state superintendent, supplemented by a statutory provision that no one shall be certificated in the cities and villages who has not had a high-school

as well as a normal course of instruction, and all upheld and emphasized by a complete supervisory system, are fixing and advancing the status of the teaching force more uniformly and rapidly than is being done in any other state. But this is only half, and perhaps not half. The great system of regents' examinations, the bringing of all the secondary schools and colleges and universities into interdependent relations under the inspection of the board of regents, the systematic regulation of the whole matter of college degrees, the punishment as a crime of the unauthorized use of the term "college" or "university," the arbitrary direction and the moneyed support given to the school and public library systems of the state, as well as to all scientific research and investigation, the unhesitating determination of the conditions of admission to the professional studies which now almost exacts a college course and is slowly advancing—all these things are stimulating and uplifting the higher educational and professional life of the state. Taken all together, the educational organization set up by this state is very much more complete than that of any other, and the educational work which the state government is carrying on directly is very much more general, exact, and effective than anywhere else in the land.

In the central and western states there is a warmth and energy of school life not found in the east. All the people are interested in the schools, and in all of the schools. They believe in the kindergarten, and the state university is as much a part of the public school system as are the elementary schools. There are fewer private schools and the children of the wealthy homes attend the common schools more than in the east. A miscellaneous company of teachers from the elementary schools of Illinois will discuss the history and philosophy of education, when such a company of teachers in New York would have little interest in such matters. The qualifications and the spirit of the average teacher in the public schools of Cleveland, Indianapolis, Chicago or Minneapolis, are higher and better than in Philadelphia, New York or Boston. The school tax is paid more cheerfully than any other tax. Individualism among the people is marked. Everyone entertains the highest expectations. There is a smooth and continuous road from the primary school up to and through the university, and all the boys and girls seriously consider whether they cannot pursue that road to the end. There is more zest and ardor in public education. There is more intensity in the teaching force. There is more pride in a complete and symmetrical public school system. The endless resources of the people are more thoroughly pledged to the support of such a system in the old Northwest Territory and beyond than anywhere else in the country.

We were all gratified and possibly surprised, the other day, at the showing of Commissioner Harris at Atlanta, touching the development of common schools for both races in the South. The fact that the school attendance in that section has increased more than twice as fast as the population, and the value of school property advanced from sixteen to fifty-one millions in twenty years, is sufficient justification for his assertion that "they are indeed building a 'New South' and its corner stone is the school."

Facts might be multiplied were it necessary, to indicate how very different the educational situation is in the different sections. While there is unprecedented progress upon the general field, and many things to commend everywhere, we could easily find much to deplore in all the sections. If we were to analyze all the circumstances we should find the conditions in the different states altogether unlike; indeed, we should find the conditions in different parts of the same state very dissimilar, and we would search in vain for any unity of educational plan throughout the country.

The reasons for this are obvious. The public educational system has grown up in the different sections. There has been no central or authoritative leadership or management except by states, and very few of those have asserted themselves.

At the time of the formation of the Federal Union there was no recognized responsibility for popular education. In the opinion of statesmen and in the thought of the multitude the responsibility for the education of children rested upon parents or guardians. The extreme to which popular thought had then gone was that government ought to encourage the people to educate their children, and make some provision for the very poor on the ground of public charity. The public school system, cornered upon the taxing power of the state, had not been conceived, and of course it had no consideration in the convention which framed the Federal Constitution. The responsibility for the support and supervision of public education is with the several states, but not by reason of any determination to that effect in national council. It has resulted from the fact that it has never had any authoritative consideration, and from the operation of the general principles that the sovereign authority not specially ceded to the United States is reserved to the several states.

As a result the general government has never exercised any authority touching the public educational system of the country. It has made gifts of public lands in aid of education, and it has said that if its gifts were accepted certain conditions must be complied with; but it has made its gifts to the states and it has always recognized the rights of the states to manage their own educational affairs. It has

set up a national bureau of education, but it has given it no power, for apparently it had none to give. This bureau may collect information when correspondents will send it in, and having secured it in one way or another, it has the high privilege of sending it out. But it cannot join an issue, it cannot exact compliance, it cannot enforce a request. This is not saying that the bureau has not exerted an influence. The vast difference between power and influence is readily recognized. Without power, it is true, that it has exerted no inconsiderable influence, but that has been because its habitat is at the seat of government, because it has the semblance of representing the federal power, and perhaps, more than anything else, because of the personal eminence of the men who have held the office of commissioner. It is exerting more influence to-day than ever, and a high and commanding influence it is; but that is because the man at its head is a man of large experience in affairs, a student of people and conditions, a statistician with discriminating sense, a popular speaker of great force, the brightest scholar we have, and the most profoundly philosophical writer upon educational themes in the world.

With indomitable energy, these qualities have been exerting a telling and lasting influence upon the progress of popular education. The thought and effort of this man have not been confined to the operations of the schools alone. With a clear view of the innumerable ways in which the numberless instrumentalities by which the average of intellectual acumen and of moral sense may be advanced, he has laid hold of all the ropes within his reach for the good cause of popular enlightenment. His writings have stimulated every educational interest and uplifted every teacher from ocean to ocean. He has been in the midst of all the great educational gatherings in the land to advance new doctrines. But he has been very much more than a preacher of doctrines, he has been a veritable knight-errant in the world's battle for the highest intellectual freedom. He has been aggressive and he has shown resisting power. He has joined issues and waged combats. His thought has been so deep and his force so great that a contest in which he enlisted has never been in doubt; while his wit has been so quick and his words so gracious that the brightest men in the educational work of the generation have struggled with each other for the honor of a brief bout with him in the face of inevitable overthrow.

But we must not be misled by the work of a great man. The man will in time give way to another, and what sort of another we do not know. It is pertinent to ask also, whether he might not have accomplished more if he had been at the head of a department and a member of the cabinet, rather than the chief of a bureau. It cannot be out of

order to raise the question for serious consideration, whether the popular educational interests of the country are not of sufficient importance to justify the demand that the bureau of education shall be enlarged, given greater prominence and dignity, and that a closer supervision by the general government shall be extended over this whole subject of such pre-eminent consequence in the affairs of the nation.

A bill was introduced in the last congress to create a department of commerce and manufactures, and to make its chief executive officer a member of the president's cabinet. Commerce and manufactures are already measurably provided for in departments already established, but the sagacious men who are promoting these interests see how much closer care they would be likely to receive, and how much more dignity they would be certain to attain if they were elevated to the rank of a separate department. Is not the same thing true of the educational as of the commercial interests of the country?

Could not a national department of education be created, which would supplement without embarrassing the present situation? In all the states the schools are left, as far as they may be with advantage, to local support and supervision. The states legislate with a view to insuring a school within reach of every home and then leave it to the people to determine what sort of schools they shall have. It seldom goes farther than this. In ninety-nine cases out of a hundred it might go much farther with advantage to all the interests concerned. Could not the federal government come in and help the weak, or in general do what the states leave undone?

In a few moments we shall hear with pleasure a representative (Mr. Booker T. Washington) of a distinctive line of educational work, who, like Lord Byron, the morning after the publication of "*Childe Harold*," has become famous all at once. His fame rests not so much upon his educational ability and his power as a public speaker, although those are greatly admired, as upon the fact that he has shown discerning sense as to the true lines upon which the greatest educational and sociological problems of our country may be worked out. What could not the federal government do in the way of aiding and supporting the states of the South in that mighty undertaking? And while it was doing so how it would bring the people together, not only by strengthening the constitutional cords which bind us together in one nationality, but by developing the institutional life which must make us one people. But there are states, not in the South, which stand in need of outside assistance and some direction in the work of popular education. The United States has given much public land to public education and it has more to give, perhaps more

now than it will ever have again. What it gives to education is so much clear gain, not only for what it will accomplish, but for what it will prevent. All that it can be led to do in this direction will not only help the interests it aids directly, but will promote its own efficiency at home and enhance its honor abroad.

We must all confess that the general government, as a rule, does well whatever it undertakes to do. Its regular army is respected and trusted for its discipline and efficiency. When the people are threatened with an insurrection at our doors they spend less time in studying the constitutions than in throwing up their hats for the regular troops. Our postal system is a model of authoritative sagacity and efficiency. The civil service of the government is vastly superior to that of any of the states, for it is more permanent, more complete, more substantial. The federal courts attain a dignity gained by none of the state courts. The administrative functions of the United States are performed with exactness and certainty. She accomplishes very completely what she undertakes. Those who violate her laws feel her heavy hand, and every citizen of the republic has added security and deeper love for the flag because it is so. Should not the popular educational interests of the country have much greater advantages than they now have from the general and authoritative operations of this great power? Would not its exercise make our great system of popular education more systematic and more uniformly effective?

This is not a new question, but it has never been very much considered. Indeed it has never been considered at all in any authoritative quarter. Suggestions have from time to time been made in the direction indicated, but the reasons for and against them have never been adduced. The subject has never been up in congress or in the press. It can hardly be supposed that if the imperative necessity of universal popular education has been recognized, if the status of popular education had been anything like what it is now at the time of the formation of "a more perfect union," that the subject would not have had much consideration in the constitutional convention. It is brought up to-night, not with any thought of presenting it very closely, and with regret that there is no opportunity to discuss it now, but in the belief that the time has come when the popular educational interests of the country need more support, more management, more leadership from authoritative centers, and that if the government of the United States shall be invested with the right and charged with the duty to render this assistance the result will be a great advantage to all of the high interests concerned.

My confidence is great that this course would not lessen but stimulate, extend and direct the manifest and gratifying tendency towards

✓ individual initiative among the people, while it would solidify and harmonize our public educational system and give greater freedom, higher tone, stronger virility and more substance to the intellectual resources of the Republic. When it was doing this at home it would be gaining us added respect in the world and exalting us among the nations. And let us not be unmindful of the value of that. While unwilling to accept doctrines at variance with the trend and spirit of our national life let us have none of that abhorrent self-conceit which must make us heedless of the experience or indifferent to the highest admiration of all the constitutional governments of the world.

THE INFLUENCE OF THE NEGROES' CITIZENSHIP.

BY BOOKER T. WASHINGTON, PRINCIPAL OF TUSKEGEE NORMAL INSTITUTE, TUSKEGEE, ALA.

[STENOGRAPHIC REPORT]

Mr. President, Ladies and Gentlemen: (The discussion of the educational needs of the South would not be complete without a consideration of the condition and the needs of the seven millions of the race which I have the honor to represent. It is interesting to know the number of suggestions that have been made within the last thirty years looking towards improving the condition, or getting rid of the negro in this country.) I remember about a year ago when a ship set sail from the port of Savannah, Georgia, bound for Liberia, Africa, that the news was flashed from one end of this country to the other, "Now the negro problem will very soon be solved in this country as the negroes have decided to return to Africa, the land of their fathers." But those persons who reasoned thus forgot that that same morning down south, before breakfast, at least six hundred more negro children were born. And so the problem will not be disposed of in that way.

I was on a train in the west a few days ago and sat by the side of a gentleman who was very earnest in his endeavor to convince me that the negro after all was fast disappearing in this country; that he was fast being swallowed up by the white man; that he was fast becoming bleached out, as it were, and that after a while there would be no such thing as a negro in America. Now, I do not know as you have noticed it, but the moment it is proven that a man has even 1 per cent. of African blood in his veins, he becomes a negro; he falls to our pile; in the count we claim him every time. The 99 per cent. of Anglo-Saxon blood is not strong enough to overcome the 1 per

cent. of African blood; the 99 per cent. counts for nothing and we claim the man. So you see we are a stronger race than you are; we have a greater power of attraction and absorption, and at that rate we will ultimately absorb you. I have a good friend down in Georgia who argues very strongly from the platform, and in the press, that the way to solve the negro problem is to set aside a territory in the West, and put him into it, and let him grow up a race unto himself. Now, there are two slight difficulties about that suggestion. In the first place you would have to build a wall about that territory to keep the black men in; in the second place you would have to build a much higher wall to keep the white man out. In fact, if you were to build ten walls about South Africa, you could not keep the white man out of there if he heard there was any gold in it. No, my friends, none of these suggestions will do. (There is but one way to solve the negro problem, as there is but one way to solve all problems. Treat the negro as a Christian gentleman, no more, no less. If you educate his head and hand and heart, he will take care of himself.)

But there are reasons why we have some rights here. We are the only people, when you come to think of it, we are the only citizens of this country who ever came here by a special invitation and by a special provision. Your race came to this country against the protests of the leading citizens at that time. (Having been so important to the prosperity of this country that we had to be sent for at great inconvenience and expense on the part of yourselves, do you think we are so foolish as to leave now? No, we have a mission here and part of that mission is to help lift you up; to help make you better; to help you live Christian lives, and wherever you lack civilization to help give it to you. I suspect you think we have a pretty hard job on our hands. But we are not discouraged by any means.)

But seriously, (at Tuskegee, in connection with the work to which I have given my life, we have from the first tried to make a thorough, systematic study of the actual condition and needs of the people by whom we are surrounded, and shape our educational work in a way to improve and bring up the condition of the people about us. Now, the temptation is, I think, with educational work, as in all work, to do that for the people which has been done for people for thousands of years, very often forgetting the actual need and conditions of the people by whom we are surrounded.) I remember that I was in Boston some time ago and there talked to a young colored man who was studying medicine in one of the New England medical colleges. I asked this young man what branch of medicine he was giving special attention to and I remember his reply that he was "making a specialty of the study of nervous diseases." I asked him where he expected to

practice medicine after he finished, and he said he was "preparing to practice medicine among the colored people down in the Mississippi bottoms." I said to him, "My friend, did it ever occur to you that not one black man in a hundred thousand ever has any trouble with his nerves? Did it ever occur to you that the race in the Mississippi bottoms has not yet advanced to that delightful stage of civilization where he is troubled very much with nervous prostration?" Now, do not understand me to say that in the future we are not going to be just like you, afflicted with nervous prostration and everything else. We may have it, just as you do now, fifty or a hundred years to come; but fortunately or unfortunately we haven't gotten there yet.

But what are the actual needs of the people in the black belt of the South? I refer to those who are on these large cotton, rice, and sugar plantations, rather than those in the cities and larger towns.

(A large majority of the people on these plantations are ignorant, without habits of thrift. They are industrious but they are in debt; they have mortgaged their crops to keep them alive and they are attempting to pay a rate of interest that often ranges from 15 to 40 per cent., and, of course, they come out at the end of the year in debt.)

(The schools in the plantation districts are rarely in session more than three months. The scholars are often taught in places which bear little resemblance to anything like a school building. Each colored child in this cotton district receives this year from the public fund for his education about ninety cents. [I] do not know how it is in this state, but I think you will find in the state of Massachusetts that each child has spent on him for his education each year between \$18 and \$20. Ninety cents for the black boy of Alabama, and \$18 for the white boy of Massachusetts.)

Now, as to morals and religion. During slavery the people reasoned something like this, "My body belongs to my master, and taking master's chickens to feed master's body is not stealing." One old colored man whom his master caught stealing his chickens said to the master, "Well, now, massa, you 's got a few less chickens, but you's got a good deal more nigger."

Now our people are attempting to apply something of that same kind of logic to this mortgage system that obtains in the South, and it is not hard for you to realize some of the results of that kind of reasoning. (It is not hard for you to understand something of the moral and the religious condition of the people where so large a proportion of them are forced to be born, to eat, sleep, drink, cook, to get sick and die in one room from year to year. [B]ut what is the remedy for that condition of things. If in the providence of God the negro got any good out of slavery, he got the habit of work. In that

respect he is different from most of the races among whom missionary effort is made. I know we have a class of people around the railroad stations and the corners of the streets and in the bar-rooms just as you will find among any people. We have some black sheep in our flock as there are in all flocks. I mean to say that the rank and file of our people on these plantations of the South are working along from year to year, but without advancement by reason of their ignorance and want of skill. Their labor is confined to the lower forms. (At Tuskegee we are trying to develop the head, and hand, and heart of 800 young men and women in such a way that they will also be able to do what is called higher forms of work. I know in this country it is everywhere regarded as all right for the negro to work at the lower forms of work.) There is no trouble about his raising cotton in the Mississippi bottoms; but the trouble comes when the negro attempts to work that cotton—to follow it from the field through the gin up into the factory, and from there up into Massachusetts where it is woven into the higher fabrics. (Whenever the negro attempts to enter the shop or factory in the state of Massachusetts where the cotton is manufactured into the form of fabrics, the door of that factory is likely to be slammed in his face. The same thing is true in Georgia and Alabama, so far as these higher forms of the manufacture of cotton is concerned.) (There is a law or custom, in some parts of the South, that prevents the black man from riding in a first-class car, even when he has a first-class ticket. Let that same black man apply in a shop of the North, where that same first-class car is manufactured, and they will put the black man out of that shop if he attempts to take a part in the manufacture of that first-class car.) (There is no trouble about the negro working in the pig iron or getting it out of the mine in its raw form, but the trouble comes when he attempts to follow that pig iron until it gets into the form of watch springs. Then the door is shut in his face. We want to bring about such skill, such intelligence all over this country among the black people, that their labor will not be confined as it is at present, to the lower forms only.)

(Another trouble is that after the negro works he does not know how to utilize the results of his labor. What he earns gets away from him, on these plantations, for whiskey, snuff, cheap jewelry, and in a hundred other ways which I have n't time to mention. I have often gone into these one-room cabins where I have found clocks for which these people have paid, on the installment plan, as high as twelve or fourteen dollars, while everything in that cabin aside from that clock would not be worth that much money. In nine cases out of ten there

would not be a single member of that family who could tell nine o'clock from twelve o'clock by that timepiece.)

- (I repeat, what is the remedy for that condition of things? Ten years ago in Alabama I could have shown you a community just such as I have attempted to describe, where the people were in debt, mortgaging their crops, living from hand to mouth, with school three months in the year, taught in a rough-looking cabin. But ten years ago there went out from our institutions men trained in head, and heart, and hand, and they went there at their work in a plain, simple way. These graduates taught these unfortunate people to come to their weekly meetings, and in these meetings taught them how to economize and save money instead of paying it out for whiskey and snuff. Every one of them began, and soon they were building better houses; then they built a school house and had school more than three months in the year.) And so that work has gone on during these
- ten years. (I wish I could take you into that community and show you these people almost out of debt, owning their own homes to a large extent; living in houses of three or four rooms with well-cultivated farms and the advantages of church and Sunday school.)

- I could there show you a community that has been revolutionized in its educational, moral, and religious life. [No one gave these people a single dollar from the outside with which to bring about this improved condition.] Every improvement took place by reason of the fact that these people had these leaders, these guides, who induced them to make a change in their methods; showed them how to take their money which had hitherto been scattered to the winds for mortgages and whiskey and snuff, and use it in the direction of their own civilization. [My friends, if I know anything about this problem] in the South, it is that this kind of work is what we have to look to for our salvation.)
- I was in one of these communities six months ago and I saw not only a change like that, but in addition to that (I saw one white man in that community, a southern white man who forty years ago owned at least 100 slaves. That white man had been so won over to believe in education that he had taken \$400 that year out of his pocket and contributed it towards building an excellent school-house for the colored people in the community.) (I was on one of these cotton plantations some time ago and I saw an old man, at least seventy years of age, living in misery, filth, and poverty. As I glanced about that old man's surroundings and saw how he was living in a crude log cabin, I said, "My friend, it seems to me that if you were worth your freedom you would have improved during the thirty years that you have been free." And the old colored man looked up into my face and said, "Mr. Washington, I want to improve, I want

a change, I want to have something for my wife and children before I die, but, Mr. Washington, I do not know how; I do not know what to do first." That old man looked up into my face and said that, and as I looked into his lean and haggard countenance I realized as I had never realized before, the terrible curse of slavery upon my people. The greatest injury slavery did us, as a race, was to deprive us of the opportunity to exercise the little executive power that we might have had; a slavery, which, had it continued, would have been the destruction of the Anglo-Saxon race. For 250 years we have been taught to depend on somebody else, for food and clothing, for shelter, and for every move we made in life. You cannot expect habits with a growth of 250 years to be gotten out of a race in twenty-five or thirty years.) Unless we can educate the children and give the older ones the benefit of good example and wise counsel, you will find little change in the future. However, you will find a great improvement has taken place within the last few years in these communities in the south.

(Now, some people have had the idea that all that was needed in the South was some one to organize a Christian church on one of these plantations, and another on another plantation, and they felt that the problem would thus be settled on those plantations. But it was not; no substantial improvements can be accomplished in that way. I will tell you, my friends, that in Alabama—I do not know how you find it here—but in Alabama it is a mighty hard thing to make a good Christian of a hungry man.)

You know as a race, we are rather emotional; we have a good deal of feeling about us, and we feel our religion in a way that you do not. I believe the average black man can feel more religion in ten minutes than the average white man can in a day. You beat us in some things, but I believe when it comes to feeling we can beat you. Down south when a person gets converted, we look for him to exhibit a great change in his conduct and make some manifestations of it in a visible form. If he does not do that we become skeptical about his religion and we say, "He has got the white man's religion." Now, this emotional side of our nature rather tempts us to spend a good deal of our time preparing in a certain way to live in the next world, which is all right. But I notice you not only prepare for the next world, but you take good pains to prepare for this world also. That is one of the differences between us. The average sermon you hear preached to the people on the cotton plantations is made up of an imaginary and vivid description of heaven. Our preachers like to preach and sing about living in a great, big, white mansion—that is, these people who live in little log cabins down in this world. They like to think and sing about wearing golden slippers in the next world while they trudge along

bare-footed in this. On the sugar plantation down in Louisiana they have a song they like to sing which says:

"O, give me Jesus and take all this world—"

and the white man in Louisiana generally takes the black man at his word.

The white man down there gets about all the negro has except his hope and his religion. I do not speak with irreverence; yet, (after eating and sleeping with my people and coming into contact with them under all conditions and circumstances night and day for fourteen years on these plantations of the South, I think I have learned this, that the way to teach them to have the most of Jesus in a permanent form is to teach them to mix in with their religion some practical ideas which will bring about an improved material condition. Give them the benefit of well-directed industry, a house with two or three little rooms and a little bank account. The negro can appreciate that as well as a white man does, and in proportion as they mix these things with their religion you will find they have a practical Christianity that is worthy of the name. These are some of the lessons which we are trying to push forward at every opportunity, although we meet with some prejudice.) (At one time the late Hon. Frederick Douglas was making a great speech in the South and he began to warm up to his subject as only Frederick Douglas could do.) There happened to be in an out-of-the-way corner two persons who seemed unusually interested in what Douglas was saying. One was an American, and the other an Irishman. The Irishman said, "Be jabbers, who is that making such an eloquent speech?"

The American said, "That is Frederick Douglas, the great negro orator."

"You do not mean to say a negro can speak like that, do you?"

"Oh well, he is not a negro, he is a mulatto, a kind of half negro."

"Be jabbers, if a half negro can speak like that what in the world can a whole negro do?"

Now, my friends, I claim that during the last thirty years in which we have been in partial possession of our freedom we have not had an opportunity to become even half men and women. But if we meet with the same help, the same encouragement in the future that we have in the past, we are not only going to become whole negroes, but, what is better, we are going to become whole, helpful American citizens.

But what of your white brethren in the South, those who are still suffering the consequences of American slavery for which you and they are responsible? What was the task you asked them to perform—to return to their desolate homes after years of a relentless war, to

face blasted hopes, a shattered industrial system and devastation everywhere. You asked them to add to their burdens that of preparing, in education, politics, and economics, for citizenship, four millions of their former slaves. That the South staggered under the burden, made mistakes; that disappointment in a measure has been the result need surprise no one. (This country has never yet realized, has never yet comprehended, its duties to the millions of people in the South known as the poor white people. It needs no prophet to tell the condition of the future when the poor white boy in the country districts of the South is in school but three months a year, and your boy is in school nine or ten months; when the poor white boy in these country districts often has but one dollar's worth of education and your boy \$20 worth; when in the south he enters a reading room or library perhaps two or three times a year, while your boy finds a reading room or library in every hamlet, almost every house. The poor white boy of the south hears a lecture not more than once in two or three months, while your boy can hear a lecture or sermon every day of the year.) My friends, there is no escape from it, you must help us raise the character of our civilization or else you will be lowered with it. (No member of your race, in any part of this country, can harm the weakest or meanest member of my race without the proudest and best blood in the Anglo-Saxon race being degraded. When the South is poor you are poor. When the South is ignorant, you are ignorant. When the South commits crime, you commit crime.) Mere abuse will not bring a remedy. It seems to me (the time has come when we should arise in this matter above party or race or section into the atmosphere of the duty of man to man, Christian to Christian, citizen to citizen; and if the negro who has been oppressed and denied rights in a Christian land can help you, North or South, to rise into this better atmosphere of unselfishness and Christian brotherhood, he will have indeed a sufficient recompense for all that he has suffered at your hands. So long as there is ignorance among the poor white people of the South, so long there will be crime against the negro and crime against our boasted civilization.)

In considering this matter I thank God that I have grown to the point through the opportunity which your generosity has given me and those like me; (I have grown to the point where I can sympathize with the white man as much as I can sympathize with the black man. I always tell our students when they go out into the world to work, never to feel themselves above the white man. I thank God that I have grown to the point where I can sympathize with the southern white man as much as I can sympathize with the northern white man.) To me

"A man's a man for a' that."

I believe, as a race, we strengthen ourselves at every point in extending this symmetry, for no race can go on cherishing hatred and ill-will toward another race without being lowered and degraded in all of those elements that go to perpetuate a strong, growing, and generous manhood and womanhood. I propose, in other words, that no race or individual shall drag me down by making me hate him.)

(This problem will work itself out in the South in proportion as the negro's skill and intelligence and character can produce something the white man wants or that the white man respects; hence the value of industrial education. One race respects another in proportion as it contributes to the markets of the world. When you consider that question closely, one white man don't care a great deal about another white man unless he has got something that he wants in the way of culture, or influence, or property, or sometimes a daughter. The black man who has a mortgage on a dozen white men's houses will have no trouble in his intercourse with the white men. The black man who spends \$10,000 a year in freight charges with one of the southern railroads can select his own seat in the railroad coach, or else a Pullman palace car will be put on for his special accommodation. When the black man develops to the point where by reason of his knowledge and improved skill in agriculture he can produce forty bushels of corn alongside of the white man producing but twenty in the same kind of soil, then the white man will come to the black man to learn. They will sit down and talk about it, and I believe the black man will be a good friend to the white man. When the black man has \$50,000 to loan, he will never want for friends and borrowers among his white neighbors.) (It is meet, it is right that all the privileges guaranteed to us by the constitution be sacredly guarded; but it is vastly more important that we be prepared as a race for the exercise of these privileges. Those who suffered and fell on the field of battle performed their duty faithfully and well. But a duty remains for you and me. The mere fiat of law could not make a dependent man an independent man; could not make an ignorant father an intelligent father; could not make one race respect another. These results will come to the negro as to all races, by beginning at the bottom and gradually working up towards the highest civilization.) My friends, by reason of ignorance, by reason of our freedom beginning at the top instead of at the bottom, the burden has been too heavy for many to carry; the opportunities have been too great. (We have spent time and money in political conventions, making idle political speeches, that could have been better spent in becoming leading real estate dealers and leading carpenters and truck gardeners, and thus have laid an imperial foundation on which we could have stood and demanded our rights.)

In conclusion, my friends, I make no selfish appeal; it is a plea to save yourselves. (The negro can better afford to be wronged in this country than the white man can afford to wrong him. We are a patient, humble people; we can afford to work and wait. There is plenty for us to do away up in the atmosphere of patience, forbearance, forgiveness, and goodness.) There the workers are not many and the field is not overcrowded. If others will be little, we can be great. If others would be mean, we can be good. If others can push us down, we can help push them up. If ever there has been a people in this world who have observed the Bible injunction, "If thy brother smite thee on one cheek, turn to him the other also," that people has been the American negro.

(To right his wrong the Russian hurls his dynamite, the Frenchman applies the torch as in the French Revolution, the Indian flies to his tomahawk; but the negro must lie by, must be patient, must forgive his enemies, and depend for the righting of his wrong upon his midnight moans, upon his songs, upon his four-day prayers, and upon an inherent faith in the justice of his cause.) If we may judge the future by the past, who will dare say that the negro's course is not the better one. Think of it, my friends; (we went into slavery a piece of property and we came out American citizens; we went into slavery pagans, we came out Christians; we went into slavery without a language, we came out speaking the proud Anglo-Saxon tongue; we went into slavery with the slave-chains clanging about our wrists, we came out with the American ballot in our hands.) Progress is a law of God and progress is going to be the negro's eternal guiding star in this fair land.

Memorial Addresses.

CONSTITUTING THE REPORT OF THE COMMITTEE
ON NECROLOGY FOR 1896.

NORMAN A. CALKINS, NEW YORK CITY.

BY HORACE S. TARBELL.

ALSO BY EDWIN C. HEWETT

DANIEL B. HAGER, SALEM, MASS.

BY WILLIAM E. SHELDON.

JOHN KRAUS, NEW YORK CITY.

BY HORACE S. TARBELL.

Norman A. Calkins, LL.D.

BY HORACE S. TARBELL, SUPERINTENDENT OF SCHOOLS, PROVIDENCE, R. I.

The National Educational Association owes a great debt to Norman A. Calkins. Early in the life of the association he became one to whom its prosperity was dear and in whose hands its interests were safe. Many aged men have been members of this association, but few have been its fathers.

- Norman Allison Calkins was born at Gainesville, Wyoming Co., N. Y., September 9, 1822. He was the third son of a pioneer settler of that town. His parents were born in Connecticut. His father's ancestors settled in that state as early as 1651. The first of this family in America was Hugh Calkins, who landed at Plymouth, Mass., in 1640, coming from Monmouthshire, England, on the border of Wales.

As so many noted men have done, young Norman Calkins went to a country district school in his boyhood days and in his youth attended an academy for several terms. At the age of eighteen he began to teach during winter terms, but returned to his studies between the terms of teaching. He became principal of the Central School in his native place, and at the age of twenty-three was elected town Super-

intendent of schools. After re-election he resigned and went to New York where he engaged in educational work, including the editing and publication of a paper called "The Student and Schoolmate." For several years he conducted teachers' institutes in the states of New York, New Jersey, Pennsylvania and Connecticut. In 1862, being then forty years of age, he was elected assistant superintendent of schools in New York City, which position he held by successive re-elections until his death, December 22, 1895.

During those thirty-three years the great work of his life was done. How great the influence of such a man for such a length of time in a position so prominent! It is no reflection on others to say that for a generation Dr. Calkins has stood in the eyes of the school men of the United States as the chief representative of this great system of schools.

In 1864 he was appointed instructor in methods and principles of education in the Saturday Normal School. At the opening of the Normal College of the city of New York in 1871, he was appointed professor of methods and principles of teaching in the Saturday sessions, which position he held until 1882, when the Saturday sessions were discontinued.

In 1861 he published "Primary Object Lessons," a book of great merit, which has been read and re-read and made the guide of daily work by many thousand teachers of the United States—a book lying at the foundation, both from its character and the date of its appearance, of the great body of pedagogic literature published in America. This remarkable book has been translated into the Spanish and Russian languages and is used extensively in Europe and South America.

In 1881 "Manual of Object Teaching" was published; in 1889 "Ear and Voice Training." Dr. Calkins was the author also of a series of "Phonic Charts" and "School and Family Charts." He arranged the material and prepared the plans for "Prang's Natural History Series" and the accompanying manual; also for the "Aids for Object Teaching—Trades and Occupations." Besides these books he has written many articles for the educational press.

For twenty-six years he was treasurer of the Congregational Church Building Society. He served as trustee as well as treasurer, and was chairman of the finance committee at the time of his death.

When we consider the varied lines of his activity and realize what he accomplished in each, we shall be most impressed with his mental resourcefulness and wonderful power of steady work.

What a personality he was in New York City! Thirty-three years a superintendent of schools, eighteen years delivering week by week, to appreciative teachers, the rich results of profound thought and

ripe experience on the foundation principles of education and their most profitable applications.

He was a leader in educational thought and was one of the first among us to make the study of the child the foundation of pedagogy. He knew the child mind, and all his educational thought and work have been along lines that must abide because drawn upon a sure foundation. He was a man that children loved, and teachers knew to be a friend wise and true.

He could not be otherwise than prominent for he was a leading spirit in any body of men among whom he had a place. Not because of any self-assertiveness, for he was far from self-assertive, but because on all the themes which he discussed he thought clearly, investigated carefully, and decided broadly. Besides this, he had that capacity for details, that patience for work, which made him safe, always sure of his facts, always trustworthy in his conclusions. Furthermore he had a commanding presence, a genial manner that was the natural expression of a kind heart.

He had no rivalries. Others brought to him without his seeking all the honors that his ambition craved. These honors he appreciated and enjoyed. They were to him no mere payment of a debt due to ability and service, as to some men such things come. He felt that they were tokens of the good will of his friends, and therefore had their greatest value in their source rather than in any special lustre of their own.

When he had received all the honors which this association has to bestow, he did not retire within himself nor nurse his greatness in solitude, but was still as ready as any to do work, to take pains, to spend wearisome nights for the sake of the association. Witness to this his work as editor of the Chicago proceedings of this association. Here was a mass of matter entirely beyond the means of the association to publish, all of it good and worth publishing, but some parts better than the rest. Who should read all this mass of matter, select the best from the good, prune the selected papers of the commonplace and unessential portions, read the proof and attend to the details of publication? Who could be trusted to be both kind and just, discriminating of merit, cognizant of educational thought, judicious, courageous to do the wise thing though it might cause heart-burnings among distinguished men, and who was, above all, known throughout the United States and the educational circles of the world to possess these qualities? Who but Dr. Calkins could do this? What busy man possessing these qualities and this reputation would spend for months the spare hours of a laborious occupation to do such a work? He looked for no honors therefrom; but some one must do it, and the thoughts

of all were directed to him. This for him was enough. He accepted the task and performed it as all knew he would. This is not one of the greatest of his services but is a convenient illustration of the ability and character of the man and of the confidence reposed in him.

He was a conspicuous figure among us for many years. To many of us the pleasure of meeting Dr. Calkins at these annual gatherings has been one of the attractions to draw us hither. We were sure he would be present, and sure of a warm hand grasp, a kind inquiry, an hour of gratifying intercourse with a man who was great in intellect, ripe in experience, wise in advice and sympathetic in spirit. •

Dr. Calkins was prominent in the affairs of this association for many years before he became one of its conspicuous officeholders. From its very beginning he had been a constant attendant upon its meetings and influential in its management. In 1883 he was elected treasurer of the association and re-elected in 1884 and in 1885. In 1886 he was President of the association at the meeting held in Topeka, Kansas.

One of the greatest services rendered by Dr. Calkins to this association was his work as chairman of the board of trustees, which position he held from the organization of the board to the time of his death. He has had more to do with the policy and action of this board than all the other men who have honored the office or been honored by it.

Beginning their work when no funds existed, it has been the duty of the trustees to assist in the creation of funds, and especially to care for and invest the funds accumulated in prosperous years.

The care of these funds is a labor of considerable amount and requires constant exercise of business judgment. For all the years during which a fund of \$50,000 has been accumulated this work has been done, this care exercised, this responsibility assumed by Dr. Calkins without thought of any reward but the consciousness of service to the association. Not even credit has come to him for this beyond a small circle of men most interested in the association. And yet so strong was his regard for the association, so complete his devotion to our interests, that he willingly did all this; and I suppose the only feeling that ever entered his mind in reference to this work was one of gladness that he could do this service.

I have dwelt upon his connection with this association and our indebtedness to him. To most of us it was in his capacity as an officer here that he was best known. Yet this is not, could not be, the place where his greatest service has been done. In the schools of New York City he stood for progress, he was a leader of teachers

seeking to follow nature's laws. To them he was the bearer of the new light that pedagogic science quite as much as any other sheds abroad. He was the teacher's friend and counsellor. What higher encomium can any man have? But great as will be the record of the good he has done on other fields, I feel confident that his service to the world has been greatest in the books he has written. Before I ever met the man I had read and read again one of his books. In publisher's parlance we hear of epoch-making books. In professional parlance may we not say that Calkins' "Primary Object Lessons," was an epoch-making book? To judge of its merit and influence, we must consider when the book was issued and how meager at that time was the teacher's professional library.

The degree of LL.D. was conferred upon him by Marietta College, Ohio, in 1891, and yet he was not primarily a literary man. It was as a teacher and as a man of affairs that his laurels were won, and it is thus we shall remember him.

Let us cherish his memory. Too early, though seventy-three years of life were allotted to him, has he gone from us.

We need his leadership. We miss his great heart and warm hand, his unselfish devotion to the cause of education and his faith that this association may be made a powerful means for its advancement.

BY EDWIN C. HEWETT, BLOOMINGTON, ILL.

[Read before the National Council of Education.]

At each of these annual gatherings some faces that we have been wont to see are missing, some friendly voices are silent; and the saddest thing about it is the knowledge that we shall see these faces and hear these voices no more. We put on record a few appreciative words, and then go on our way more lonely, yet with tender memories and fond recollections.

Every year, for many years, with only two or three exceptions, we have met one whose clear-cut, kindly face was familiar to all, and whose able leadership all acknowledged. But we meet today with the sad thought that he will not be with us again. And it is made my melancholy, yet sadly pleasing duty to present to you a few words in his memory.

Norman A. Calkins was born in Gainesville, New York, on September 9, 1822; he was the third son of a pioneer settler of that town. He died at his home in New York City, on Sunday, December 22, 1895. He was married to Miss Mary Hosier in 1854. His widow survives him, with an unmarried daughter, Ella, and a son, Hiram C., who is an engineer in the dock department of the city. He was educated in the district and classical schools of his native section, and at the age of eighteen years began to teach in the winter months. In

1845 he became superintendent of schools in his native town. In the fall of 1846 Mr. Calkins came to New York and took the editorial charge of the "Student and Schoolmate," which remained under his direction for some time. I well remember this excellent publication which I took and read for several years. Through his writings in its pages I gained my first knowledge of Mr. Calkins. For several years he conducted teachers' institutes in the states of New York, New Jersey, Pennsylvania and Connecticut.

In the fall of 1862 he was selected by the board of education as assistant superintendent of schools of the city of New York, he entered upon the duties of this office January 1, 1863, and by subsequent elections he continued in the same position till the day of his death. His work here was wholly with the primary grades from first to last; he was known as superintendent of the primary departments. In this work, we are told, he wrought many valuable changes in the methods of instruction in the city. At first he stood almost alone in his advocacy of what was then termed "object teaching," but which he regarded as observation-teaching or culture. He endeavored, and with much success, to put the principles of Pestalozzi into daily practice in the schools. At the time of his death, one of the leading papers of the city said of him, "No superintendent ever equalled him in popularity among the teachers or excelled him in the work of the primary schools." He was made instructor in the principles and methods of education in the Saturday Normal School in 1864, and the attendance upon his lectures was greater than that upon any others. In 1871 he became professor of methods and principles of teaching in the Saturday sessions of the Normal College; he held the position until 1883. He was also the author of six or eight books on educational topics, which are very valuable and widely known. On June 24, 1891, Marietta College conferred upon Mr. Calkins the degree of LL. D.

His was pre-eminently a busy life, and his work and influence in the educational world survive him. The New York Schoolmasters' Club, of which Mr. Calkins was a charter member and a director, at a meeting on February 8, 1896, ordered a memorial notice to be entered upon its records, from which I extract two or three sentences. "For upwards of a generation he devoted himself to the development of primary school education. His experience made him acquainted with the child mind, his manner attracted children, and his uniform kindness to child and teacher secured for him sincere and lasting friendships in the schools. That which lends lasting value to his work is the fact that he examined every educational problem from the child's point of view. As difficulties presented themselves in the

pathway of the learner he studied the conditions and prepared the methods best calculated to insure substantial progress. Hence it is that Dr. Calkins never developed fads or sensations."

But the members of this body are most concerned with the work of Dr. Calkins as a member of the National Educational Association and of this Council. For more than twenty years he held a most prominent place among us, and it would not be easy to overestimate his services.

In 1876 he was fifth vice president of the association. From 1879 to 1882 he was vice president of the department of superintendence. In 1882-3 he was president of that department. He became a life member of the association in 1879; and in 1880 he became a member of this council. From 1883 to 1885 he was treasurer of the association. In 1886 he was its president. And from 1886 till his death he was the wise and efficient chairman of the board of trustees.

He was always quiet and courteous, a genuine leader, but in no sense a "boss," and so quietly and unostentatiously was his work done that I doubt whether half our members knew what a beneficent force he was among us. It was my fortune, for several years, to know somewhat intimately what his work for us was. I served the National Educational Association as its treasurer five years, from 1886 to 1890 inclusive. During the first of these years Mr. Calkins was president of the association, and during all of them he was chairman of the board of trustees. Since 1890 I served with him four years on that board, so that, for about ten years, I was pretty closely associated with him in his work for this association. While I was treasurer he was the auditor of my accounts, and I can assure you he performed that duty in no merely formal or perfunctory way. He gave days of labor of the most careful and efficient sort to these important matters. And how ably, unweariedly, and conscientiously he wrought in devising plans for the improvement of the association, and in guarding its finances, investing its funds and caring for them I know very well. The service he thus freely rendered would be worth thousands of dollars, simply on the basis of ordinary pay for time and labor expended.

In the record of the Schoolmasters' Club, to which I have already referred, I find these words: "His knowledge of finances and his experience as a man of affairs made him custodian of first, the debts and deficiencies, and afterwards the abundance with which his prudence blessed the National Educational Association, and made possible the outlay which culminated in the publication of the reports of the Committees of Ten and Fifteen. A few days before his death he said to me, "We returned from Atlanta in 1881 \$500 in debt, we now

have a fund of over \$50,000, and I have never lost a cent of the principal or interest in any investment."

The National Educational Association was once weak; it is now strong; it was for years constantly in debt; it now has abundance; and to no man is it indebted more, for these changed conditions, than to Mr. Calkins. I think no one will dispute this statement; in my own opinion it might be made even stronger. We owe him a debt of gratitude which these words express but feebly.

For some years his health had not been very firm, but he went on his way without complaint, performing every duty faithfully and well. I am informed that his health began seriously to fail in January, 1895; yet he continued in the discharge of his official duties till the close of the school year in June. After his return from the summer outing he was able to leave his home only twice. His sufferings were very great, but he was not confined to his bed until he was seized by pneumonia only the day before his death.

As a genial friend, as a teacher, as a wise and faithful administrator, as a true Christian gentleman he deserves to be held in lasting remembrance by all who knew him. And we are sure that the memory of his sunny, benignant face will remain as a benediction to hundreds who knew him only by sight. When such men have served their generation it needs be that they must "fall on sleep," but the world can ill spare them.

REMARKS IN MEMORIAM.

B. A. HINSDALE, Ann Arbor, Mich.—It is well on occasions like this one for men to speak who have stood in different relations to the man commemorated. Unlike the gentlemen who have spoken, I was never associated with Dr. Calkins in official duties and responsibilities. My relations to him, which began about the year 1884 or 1885 and were limited to our great annual gatherings, were wholly personal. He did not impress me so much by virtue of unusual intellectual force or great scope of learning or knowledge, as by virtue of a much higher class of qualities. To me Dr. Calkins was the man of sound judgment, clear common sense, nice perception of what is due to men, clear recognition of the fitness of time and place—the man of pure heart and life, of kindness and elevation of spirit—the gentleman of personal cultivation. Not wholly, but very largely, these are ethical or spiritual qualities, and it is almost needless to observe that they are far more valuable than great intellectual vigor or wide range of intellectual attainments. I speak relatively, not intending at all to under-rate Dr. Calkins' intellectual gifts. It is fitting for us to recall the last time that we saw him among us. It was at Asbury Park two years ago, and I am sure that all who were there will recall, as in a picture, his gracious bearing and benignant presence as he moved through the corridors of the hotel, met his friends and acquaintances on the wide veranda, and mingled in the throng of the convention hall. To Denver last year there came the sad report that he was in feeble health; and I recall with pleasure some kind words that his associate, Mr. Ferrall, spoke to me, which were almost a personal message from him. I shall

long retain this last impression that Dr. Calkins made upon my mind. It is that of a man who, in a pre-eminent sense, showed in his face, manner, and bearing the great qualities that gave character to his life.

WILLIAM E. SHELDON, Boston, Mass.—It was my good fortune to know Mr. Calkins quite intimately for more than thirty years. He was from the beginning of the National Council a faithful and devoted member. In 1883 he succeeded Eli Todd Tappan, as treasurer of the National Educational Association, which office he held for three years, when he became president of the National Educational Association, and presided over the meeting of the association held at Topeka in 1886. As secretary of that year, I was brought into close official relations with him, and cannot permit this occasion to pass without bearing my tribute and testimony to his noble life and work, for many years, in behalf of education. He was a clear and able writer on elementary methods of instruction, and his contributions and addresses on educational topics were of an eminently helpful and practical character. But to me Mr. Calkins was a man whose life and character were of unusual purity and sweetness. His countenance indicated the serenity and beauty of his inner life. He impressed everyone as a wise and discreet friend, and a safe adviser. I shall ever cherish the memories of the many years of official and friendly intercourse with Mr. Calkins as among the richest blessings of my educational life. To know him was to honor and love him.

Daniel B. Hager.

BY WILLIAM E. SHELDON.

Daniel B. Hager, Ph.D., died at Sharon, Mass., August 4, 1896. In the death of Dr. Hager the educational interests of the country have lost one of their best representatives.

Dr. Hager was born at Newton Lower Falls, Mass., in 1820. His elementary training was gained in the public schools of Newton, and at the then famous Seth Davis Academy at West Newton. His special preparation for college was made under the guidance of able private tutors. He entered Union College at Schenectady, N. Y., at the age of nineteen, and graduated with high honors in 1843. He was the commencement orator and won fame as a speaker on that occasion. Three years later he received the degree of A.M., and in 1871 the degree of Ph.D. from his alma mater.

He began his lifework as a teacher while in college, and taught village schools at Schuylerville and at Kingston, N. Y. His eminent success led him to choose teaching as his profession. Immediately after graduation he accepted the principalship of the Canajoharie Academy, in New York, and remained at the head of that institution for five years. Subsequently he took charge of the Norwich Academy, New York, and after a brief service there he decided to return to his native state and accepted the mastership of Eliot (public) High School at Jamaica Plain, Mass. His interest in public schools was awakened

early in his career as a teacher, and he served two years as superintendent of the public schools at Canajoharie, while teaching in the academy. He remained for sixteen years the principal of the Eliot High School, and by his eminent success became one of the foremost educators of New England. He early joined the American Institute of Instruction, and his lecture before that body at the meeting held in Keene, N. H., on "School Supervision" was regarded as one of the most valuable papers ever heard by that association. It was printed in pamphlet form and sent to every part of the country. He urged the careful inspection of every public school and of the work done by teachers, by competent experts in methods of instruction. Unquestionably the influence of his presentation of this important factor in public school work led to the almost universal adoption of the present system of school supervision. Dr. Hager from the first felt the importance of teachers' organizations, and became an active worker in them. While in New York state he was the president of the Montgomery County Teachers' Association, and was also president for two years (1853-54,) of the Norfolk County (Mass.) Association. For three years (1856-58) he was president of the State Teachers' Association of Massachusetts, and was among the leading men in promoting the establishment of teachers' institutes and normal schools in Massachusetts. For many years he appeared annually before the legislative committees to urge liberal appropriations for public school purposes, and especially for normal schools in which "teachers should be properly trained for their work." He was a self-sacrificing and devoted friend of educational journals. He served as one of the editors of *The Massachusetts Teacher* from 1852 to 1856, and again from 1865 to 1870. From his pen came many of the most helpful and practical articles *The Teacher* contained. In the early days of its history he not only wrote for it constantly, but as one of the board of directors of the Massachusetts Teachers' Association that published *The Teacher* as its organ, he actually performed much of the manual labor of wrapping and mailing it to the subscribers. While Dr. Hager was a true friend of genuine progress and in favor of many radical reforms in educational work, he was inclined to hold firmly to principles and practice which he deemed indispensable and which had been tested by actual experience. He believed in hard study and intelligent, *individual* application on the part of pupils, as the only sure means of securing the highest attainable success in scholarship. He was the author of a series of mathematical text-books based upon these ideas. He was one of the most popular lecturers of the day before the Massachusetts teachers' institutes, and also in county and state associations for many years. His great personal magnetism and rare

humor, both as writer and speaker, made him a general favorite with the great body of common school teachers. His ripe and exact scholarship combined with his generous and manly characteristics made him the friend and active co-worker with such men as Horace Mann, George B. Emerson, Gideon F. Thayer, Cyrus Pierce, William Russell, Lowell Mason, George S. Boutwell, John D. Philbrick, Governor Washburn, David H. Mason, and others of that great group of leaders in educational work that molded the present system of public instruction. He had a great facility for work; and he made his activities felt in many fields of educational enterprise. He was a broad-minded man, and his heart was in sympathy with every agency that looked toward the promotion of all that was good in humanity. It was this spirit that led him to join most heartily in the establishment of the National Teachers' Association in 1857. At the inaugural meeting in Philadelphia he was one of the leading spirits, and served as chairman of the committee to prepare a constitution and by-laws for the association. He wrote, in one of the rooms of the Continental Hotel, on a sultry August afternoon, the remarkably concise and comprehensive preamble to the constitution which stands to-day unchanged, and clearly expressed the conception he had of the work to be promoted by this organization. It is as follows: "To elevate the character and advance the interests of the profession of teaching, and to promote the cause of popular education in the United States." May it ever stand as a memorial of the purposes of the founders!

In 1865 he was called to the principalship of the Salem State Normal School as the successor of Professor Alpheus Crosby, and retained that position until June of the present year, when failing health caused him to resign. He had covered a term of continuous service of thirty-one years, and had sent out to enrich the teaching force of the state more than 3,500 young lady graduates.

He was honored and beloved by his associate teachers, and esteemed as a true friend and wise guide by all of his pupils. He had the entire confidence of the State Board of Education and its Secretaries, Messrs. Boutwell, White and Dickinson, during his long period of service.

In the world of "good works" he was a trusted leader and helper. In Salem he was the one man universally sought for when wise counsel was needed. He served as president of the local Young Men's Christian Association, and held a high place in the councils of the Protestant Episcopal Church in New England.

During his years of educational work he probably declined more positions than any other man in the state, among which was that of

state superintendent of schools of Rhode Island, a Boston supervisorship, and the superintendency of several large cities.

Being always of rather unsound health he realized his limitations, and was content to labor in the niche of usefulness and honor in which his lot was cast. He was an earnest Christian patriot, and took a lively interest in state and national affairs. Had he possessed sound health and an ambition for public office, he could have readily secured almost any official honor in the gift of his fellow citizens. Outside of educational circles the only office he ever held was that of United States presidential elector of the Republican party for Massachusetts in 1884. His home life was very dear to him, and his seven surviving children are prominent in the East and in the West as good citizens. No man was more congenial and companionable as a friend, and none was more uniformly sought for when wise counsel was desired.

John Kraus.

BY HORACE S. TARBELL.

Professor John Kraus died in New York, March 4, 1896. He was a pioneer in this country in the introduction of kindergarten principles, methods and schools. He was born in Nassau, Germany, February 2, 1815, and came to this country in 1851. Before that time he had graduated at a noted seminary for teachers, and spent ten years of his life with much honor in teaching in his own country. He was a follower of the theories of Diesterweg, Froebel, and Pestalozzi. He was personally acquainted with Diesterweg and Froebel. At the time of his leaving, the government gave him credentials "in appreciation of his advanced ideas and judicious manner of solving the question of religious instruction of different denominations, and for his indefatigable zeal for the humanization of his pupils."

During the civil war he lost by fire in Galveston, Texas, his library, his manuscripts, and all his property. When the bureau of education was founded in 1867, Dr. Henry Barnard, the first commissioner of education, invited Professor Kraus to become connected with the same. The earliest articles in America on the kindergarten system of education were written by him; also in Barnard's volume on the kindergarten and child study, is a history of the rise and progress of kindergartens, prepared by Mr. Kraus to strengthen the positions and recommendations of Mr. Barnard's special report on public instruction in the District of Columbia. In that report the kindergarten, the connecting link between the home and school, continuing the work of nurture and development, and beginning the work of

instruction on the school inspection and perception of real objects was made the basis of a system of public instruction for the District. Mr. Kraus' inquiries cover the whole field of early training, the supplementary agencies for orphan and neglected children, and particularly all institutions based on the views of Diesterweg, Froebel, and Pestalozzi.

In the report of the commissioner for 1871, is an article prepared by Professor Kraus on "The Object of the Kindergarten," with schedules of exercises for summer and winter. In 1872, at the Boston meeting of the National Educational Association, Professor Kraus was appointed one of the "committee to inquire into the form in which Froebel's principles of education may be most efficiently applied to the educational wants of our country."

In 1873 he established, in connection with his wife, Maria Boelté-Kraus, a pupil of Froebel's widow, "The Kraus Seminary for Kindergartners, the Model Kindergarten and Adjoining Classes." Being convinced that the basis of true kindergarten activity can be built up only upon the reform of the family, and that the kindergarten constitutes the strong point of all subsequent study and should therefore not be interrupted at the proper school age, but that Froebel's principles should be applied to elementary classes, they established classes for mothers, also for nurses, and in their elementary classes adopted the special characteristics of the "school garden" as developed by Dr. Erasmus Schwab of Vienna, Austria, thus forming the organic link between the kindergarten and the school.

Professor Kraus was an honorary member of the General Educational Union in Dresden, Germany, and in 1879, he became a life member of the National Educational Association. He prepared papers upon kindergarten subjects for the meeting for the National Educational Association in Elmira, 1873, in Baltimore, 1876, in Louisville, 1877, at Chautauqua, 1880. He also lectured before the American Institute of Instruction at Fabyans, in 1879. He gave numerous courses in kindergarten work in summer schools. His greatest work, however, is a book entitled "The Kindergarten Guide," prepared in connection with Mrs. Kraus, and published in two volumes.

Professor Kraus was a learned man with progressive ideas, having a remarkable memory and being an authority on all points connected with infant education. He was a man of genial simplicity of manner and full of enthusiasm, an enthusiastic follower of Pestalozzi, Diesterweg and Froebel. He was worthy of note both in what he was himself and in what he has had the fortune to represent—the introduction of kindergarten methods and principles in America.

DEPARTMENT OF SUPERINTENDENCE.

JACKSONVILLE MEETING.

SECRETARY'S MINUTES.

FIRST DAY.

MORNING SESSION.—TUESDAY, FEB. 18, 1896.

The Department of Superintendence of the National Educational Association met in annual session at Jacksonville, Fla., in the new city hall, at 9.30 o'clock. The President, Superintendent L. H. Jones of Cleveland, Ohio, presided.

After an invocation by Rev. T. W. Veale, pastor of the First Presbyterian Church, the address of welcome on behalf of the city of Jacksonville was delivered by Hon. D. U. Fletcher, ex-mayor of the city.

Hon. W. N. Sheats, Superintendent of Public Instruction of Florida, followed with an address of welcome in behalf of the State Teachers' Association.

President Jones responded to the addresses in behalf of the department.

A paper on the subject "What is the True Function or Essence of Supervision?" was read by C. A. Babcock, Superintendent of Schools, Oil City, Pa.

Then followed a discussion of the paper by Superintendent F. Treudley, of Youngstown, Ohio, and by Superintendent J. H. Phillips, of Birmingham, Ala.

Assistant Superintendent Edward C. Delano, of Chicago, Ill., presented a paper on "What Is the Best Use that Can Be Made of the Grade Meeting?" This paper was discussed by Superintendent H. E. Kratz of Sioux City, Iowa.

The department then adjourned.

AFTERNOON SESSION.

The session had under consideration the general topic, "How Shall the Best Schools be Brought to the People in the Rural Districts?"

Dr. B. A. Hinsdale, of the University of Michigan, presented the first paper, "Some Sociological Factors in Rural Education in the United States."

Superintendent Lawton B. Evans of Augusta, Ga., followed with a paper on the same subject. The interest awakened by these papers made it necessary to limit the speakers to three minutes each. Among those taking part in the discussion were W. W. Pendergast, State Superintendent of Public Instruction of Minnesota; E. B. Prettyman, State Superintendent of Schools, Maryland; Nathan C. Schaeffer, State Superintendent of Public Instruction of Pennsylvania; Superintendent H. G. Weimer, of Allegheny County, Maryland; Superintendent A. D. Worthington, of Harford County, Maryland; Superintendent Whitcomb, of Lowell, Mass.; Henry Sabin, State Superintendent of Public Instruction of Iowa; Superintendent Eugene Bouton, of Pittsfield, Mass.

The discussion was very animated. The lateness of the hour prevented others from taking part.

EVENING SESSION.

At 8 p. m. President Jones called the department to order. After announcing that at the morning session of Wednesday the committees on nominations and resolutions would be made known, he introduced Dr. J. G. Schurman, President of Cornell University, who delivered an address on "The Vocation of the Teacher."

Professor Edwin A. Alderman, of the University of North Carolina, followed with an address upon "The University and the State in the South."

SECOND DAY.

MORNING SESSION.—WEDNESDAY, FEB. 19, 1896.

The department was called to order by President Jones at 9:30 a. m.

The president then announced the following committees.

COMMITTEE ON NOMINATIONS.

President C. C. Rounds, Plymouth, N. H. Dr. D. L. Kiehle, Minneapolis, Minn.
State Superintendent J. M. Carlisle, Texas. Superintendent E. H. Marks, Louisville, Ky.
Superintendent H. P. Emerson, Buffalo, N. Y.

COMMITTEE ON RESOLUTIONS.

Superintendent F. Louis Soldan, St. Louis, Mo. President George H. Cliff, Philadelphia, Pa.
State Superintendent E. B. Prettyman, Maryland. Superintendent A. S. Whitney, East Saginaw, Mich.
Superintendent A. K. Whitcomb, Lowell, Mass.

The selection of place for holding the next meeting of the department was then taken up. Prior to receiving invitations the following resolution was offered by Superintendent C. B. Gilbert, of St. Paul, and carried:

Resolved, That the vote about to be taken, for a place for the meeting of this department in 1897, be merely a vote of preference, and that the final selection be left with a committee consisting of the officers of this department and the Secretary of the National Educational Association; provided, that this committee shall be guided by the vote of this body in case the city receiving a majority of the votes offers as favorable accommodations and rates as any other.

Superintendent W. E. Robinson, of Detroit, Mich, then extended an invitation to the department to hold its next meeting in Detroit. This was followed by an invitation from Superintendent A. T. Barrett, of Chattanooga, Tenn., to hold the next meeting at Chattanooga. Superintendent D. K. Goss, of Indianapolis, Ind., next invited the department to Indianapolis. His invitation was vigorously seconded by the secretary of the Commercial Club of Indianapolis. The balloting gave the following results:

Indianapolis.....	72
Detroit.....	45
Chattanooga.....	14

The president then declared Indianapolis the choice of the department according to the terms of the resolution previously adopted.

A paper on "The Necessity for Five Co-ordinate Groups of Studies in the Schools" was read by Dr. W. T. Harris, United States Commissioner of Education.

Then followed a discussion of the paper by Dr. Herman T. Lukens, of Clark University, Massachusetts.

Next, a paper on "What Correlation of Studies Seems Advisable and Possible in the Present State of Advancement in Teaching" was read by C. B. Gilbert, Superintendent of Schools of St. Paul, Minn.

In the absence of Superintendent W. P. Burris, of Bluffton, Ind., the discussion of the papers was taken up by President J. G. Schurman, of Cornell Univer-

sity; Superintendent F. L. Soldan, of St. Louis; Professor McMurry, of Normal, Ill.; Dr. B. A. Hinsdale, of the University of Michigan; Professor Walter L. Hervey, of the New York College of Teachers; Superintendent Gilbert, and Dr. W. T. Harris.

The last paper of the session on "Concentration of Studies as a Means of Developing Character," was read by President Charles De Garmo, of Swarthmore College, Pa.

AFTERNOON SESSION.

The session opened by the reading of a paper on "Isolation and Unification as Bases of Courses of Study," by Dr. E. E. White, ex-Superintendent of Schools, of Cincinnati, Ohio.

In the absence of State Superintendent Inglis, the discussion upon this paper was opened by Dr. Frank McMurry, of Buffalo, N. Y., and Professor Chas. McMurry, of Normal, Ill.

Dr. White closed the discussion.

Then followed a paper on "Organic Relations of Studies in Human Learning," by Dr. W. N. Hailmann, Superintendent of Indian Schools, Washington, D. C.

A paper was then read by Professor J. M. Williams, Principal of Normal School of Jasper, Fla.

Superintendent W. S. Sutton, of Houston, Tex., read a paper on "Courses of Pedagogical Study as Related to Professional Improvement in a Corps of City Teachers."

The session then adjourned.

EVENING SESSION.

Hon. J. L. M. Curry, agent of the Peabody Fund, addressed the department on "Some Educational Questions Pertaining to the New South."

THIRD DAY.

MORNING SESSION.—THURSDAY, FEB 20, 1896.

The department was called to order by the president at 9:30 a. m.

Miss N. Cropsey, Assistant Superintendent of Schools, Indianapolis, Ind., read a paper on "What Should the Elementary Schools Accomplish for the Child?"

The paper was discussed by Superintendent F. Treudley, of Youngstown, Ohio; Superintendent Aaron Gove, of Denver, Colo., and Superintendent Carroll, of Worcester, Mass.

Then followed a paper on "What Should the High School do for the Graduate of the Elementary Schools?" by Superintendent F. Louis Soldan, of St. Louis, Mo.

The same topic was discussed by President Joseph Swain, of the Indiana University.

The last paper of the morning session, on "What Should the College and University do for the High School Graduate?" was read by James H. Baker, President of the University of Colorado.

The following resolution was then introduced by Superintendent W. B. Powell, of Washington:

Resolved, That a committee of nine be appointed to prepare a report on methods and courses of work that will promote a vital connection between the education and physical development of the child; and that the directors of the National Educational Association be requested to appropriate a sum not exceeding \$1000 to defray the expenses of the committee.

The resolution was laid on the table for further consideration.

Superintendent F. Louis Soldan then introduced the following resolution relative to the death of Dr. Norman A. Calkins, of New York.

Whereas, Since the last meeting of this department, Dr. Norman A. Calkins, the President of the Board of Trustees of the National Educational Association, has passed away, this department desires to put on record its testimony to the aid he has been to it and to the cause of education, and their recognition of the loss that has been sustained by his death.

Dr. Calkins was the President of the Board of Trustees of the National Educational Association from 1886 to the time of his death, a member of the Executive Committee, and an influential adviser in the councils of this department and of the general association.

Dr. Calkins was born in Gainesville, N. Y., in 1821, and began teaching in the district schools. It was early seen that he had an unusual apprehension of the underlying principles of education. He became a valuable instructor in the teachers' institutes. He removed to New York City, and about 1860 began to publish a paper entitled the *Student and Schoolmate*, the main object being to broaden the scope of study, which was then very narrow. In 1863 he was appointed an assistant superintendent of schools in New York City, which position he held until his death, December 21, 1895, a period of thirty-two years.

Dr. Calkins was untiring in his efforts to find and to put in operation the best methods of education. He advocated the Pestalozzian methods, commonly called "object teaching," at a time when they were held in disfavor by the profession generally. When these methods as expounded and practiced at the Oswego Normal School were attacked before the National Educational Association, and a committee was appointed to investigate and report concerning them, Dr. Calkins, as a member of this committee, reported in favor of the Oswego methods, as being a logical outcome of Pestalozzian principles.

Dr. Calkins prepared several volumes on educational subjects; of these *Primary Object Lessons* and the *Manual of Object Teaching* had a wide circulation. All his writings show him to be a most practical and yet a most thoughtful teacher. He was held in the highest esteem by the teachers in the primary schools of New York City.

Dr. Calkins became early identified with the National Educational Association, and in 1886 was made chairman of its Board of Trustees. At the meeting held in Saratoga Springs in 1885 he was chosen as its President. He held the office of Treasurer from 1883 to 1885.

He exerted a salutary influence on all he met, for he had a kind and lovable nature. This department has been the recipient of his unselfish counsels and advice ever since it was organized; be it therefore

Resolved, That we have been greatly pained to hear of the death of our beloved fellow member and associate, Dr. Norman A. Calkins, assistant superintendent of schools in New York City. We recall his long period of membership, beginning in 1866 (a life membership beginning in 1879); his uniform readiness to counsel and aid the progress of the department; his broad and sound ideas on educational matters; his charming manners and unflinching courtesy; and above all, his high Christian character and purposes. We desire to assure his bereaved family of our heartfelt sympathy. A good man has gone to his well-earned reward.

This resolution was unanimously adopted by the department.

In the absence of the chairman of the Committee on Nominations, Superintendent H. P. Emerson, of Buffalo, N. Y., made the following report for the committee, recommending as officers for the department for the ensuing year:

President—C. B. Gilbert, St. Paul, Minn.

First Vice President—A. B. Blodgett, Syracuse, N. Y.

Second Vice President—W. S. Sutton, Houston, Tex.

Secretary—Lawton B. Evans, Augusta, Ga.

The report of the committee was adopted.

AFTERNOON SESSION.

This session was devoted to round tables.

CITY SUPERINTENDENTS' ROUND TABLE.

City Superintendents met in the council chamber, City Hall.

Superintendent A. K. Whitcomb, of Lowell, Mass., acted as leader in the discussion of the following topics:

1. What methods are desirable and what have been successful in informing a community of the truth with regard to the management and control of schools?
2. How far is it practicable and desirable for a city superintendent to determine the methods of instruction in a system of city schools?
3. How can a superintendent best improve himself in his work?
4. Should the reading of the Bible be a part of the exercises in the public schools?

5. How may a city superintendent of schools best increase the efficiency of a corps of teachers?
6. How may we best develop and foster the mother element in the teacher?
7. Science work in the grades—what and how much?
8. How can incompetent teachers best be removed from a corps of city teachers?

Those taking part in the discussion were Superintendent L. C. Miller, Lima, Ohio; Superintendent D. L. Abbott, Macon, Ga.; Superintendent Barringer, Newark, N. J.; Superintendent A. B. Blodgett, Syracuse, N. Y.; Superintendent H. S. Tarbell, Providence, R. I.; Superintendent H. A. Wise, Baltimore, Md.; Superintendent W. H. Baker, Savannah, Ga.; Superintendent W. R. Harper, Americus, Ga.; Superintendent E. H. Mark, Louisville, Ky.; Superintendent Hobbs, Mount Dora, Fla.; Superintendent Griffiths, Utica, N. Y.; Superintendent C. F. Carroll, Worcester, Mass.; Superintendent Aaron Gove, Denver, Colo.; Superintendent A. G. Lane, Chicago, Ill.; Superintendent H. P. Emerson, Buffalo, N. Y.

STATE SUPERINTENDENTS' ROUND TABLE.

State superintendents met at the Board of Trade rooms.

This meeting was presided over by Charles R. Skinner, State Superintendent of Public Instruction of New York.

The following topics were discussed:

1. Interstate recognition of state certificates and the interstate distribution of documents.
2. What consideration should enter into a plan for the equitable distribution of school money?
3. What are the essentials of successful institute work?

Those discussing these topics were State Superintendents H. R. Corbett, Nebraska; A. B. Poland, New Jersey; J. Q. Emery, Wisconsin; J. M. Carlisle, Texas; O. T. Corson, Commissioner of Education of Ohio; Mrs. A. J. Peavey, Colorado; W. W. Pendergast, Minnesota; W. N. Sheats, Florida; J. R. Kirk, Missouri; D. M. Geeting, Indiana; Professor Stout, New York.

COUNTY SUPERINTENDENTS' ROUND TABLE.

The county superintendents met in the rooms of the Seminole club. This meeting was in charge of County Superintendent Joel D. Mead, of Duval county, Florida.

The discussions followed the line of the administration of duties belonging to the office of county superintendent.

The following states were represented in the discussion:

Florida, Maryland, Pennsylvania, Georgia, Kentucky, and South Carolina.

NATIONAL HERBART SOCIETY.

The National Herbart Society convened in the Elks' lodgeroom, under the leadership of Dr. Charles De Garmo, in the absence of Dr. John Dewey.

Dr. Charles A. McMurry, of Normal, Ill., opened the discussion, based upon the second supplement of the "Herbart Year Book" for 1895, considering the subject of "Interest as related to will," by Dr. Dewey.

Dr. Harris, Dr. Brown, Dr. White, and Superintendent Treudley participated in the discussion.

SPELLING REFORM ROUND TABLE.

The round table of "Spelling Reform" met in the parlors of the Seminole Club, under Professor Edward R. Shaw of the School of Pedagogy, New York, who directed the discussion along the following lines:

1. In teaching spelling how may the necessary series of associations and memories be best established?

2. Can apperceptive methods be employed in teaching spelling?

3. Should a spelling book be employed, or, should the list of words be taken from the reading and science lessons?

Those entering into the discussion were Superintendent C. B. Gilbert, of St. Paul, Professor Keppler, of Jacksonville, and Dr. Sanford, of New York.

EVENING SESSION.

The last session of the department was called to order at 8 p. m. by President Jones.

A paper on "Some Practical Results of Child Study" was read by Superintendent A. S. Whitney, of East Saginaw, Mich.

Then followed an address by James L. Hughes, Inspector of Schools, Toronto, Ont., on "The Influence of the Kindergarten Spirit on Higher Education."

After this address the report of the committee on resolutions was read by Superintendent A. K. Whitcomb, of Lowell, Mass., acting as chairman in the absence of Superintendent F. Louis Soldan, of St. Louis.

Resolved—That the Department of Superintendence of the National Educational Association extends to the citizens of Jacksonville, her representatives, and particularly her school officers and teachers, its thanks for the care they have bestowed upon the preparations for this meeting, and for their hospitable and cordial welcome.

The department returns its thanks to the press for the support which it has lent to the meetings by full and faithful reports of the proceedings.

To the various railroad lines the department expresses its appreciation of the courtesies extended by the granting of reduced rates, which have facilitated a large attendance.

The department tenders its sincere thanks to its retiring officers for their labors in connection with the meeting, whose signal success is in the first place due to the care with which they prepared the programme and the tact and efficiency with which they have conducted it.

The resolution of W. B. Powell was then taken from the table, and after some discussion was amended by motion of Dr. W. N. Hailmann, to read as follows, and passed as amended:

Resolved, That a committee of three be appointed by President Jones to submit at the next annual meeting of this body a plan or plans for collecting data as to methods and courses of work pursued at different points in primary schools, with a view to promoting a vital connection between school studies and the educational development of the child.

The following committee was appointed under the above resolution:

W. N. Hailmann, chairman; W. B. Powell, Miss N. Cropsey.

President Jones in introducing President-elect Gilbert, spoke as follows:

Before we part, one grateful pleasure remains for me to perform. I wish to introduce to you your new presiding officer, whom you have chosen to guide the future deliberations of your body. President Gilbert, it gives me great pleasure to hand you this insignia of your authority. These children of ours [pointing to the large audience] are asking you to teach them, and to you I gladly resign the pleasing task.

President Gilbert, in accepting the gavel, said:

I have been placed in two tight places in this meeting. One was when your honored leader made me a bumper between two of the heavyweights on the programme, and the other was when you called me to be your President. This is the most potent educational body in this country, if not in the world. Into its hands is given the work of shaping the educational future of the United States. When I thought of the responsibility of presiding over the deliberations of such a body of men, I was overwhelmed; but I accept the responsibility. I have sat among "these children of ours," and have been one of them. I shall be one of them, and shall sit to learn, as before.

President Jones then declared the department adjourned.

R. E. DENFELD.

Secretary.

ADDRESS OF WELCOME.

BY HON. W. N. SHEATS, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, FLORIDA.

Mr. President, Members of the Department of Superintendence, Ladies and Gentlemen:

As the representative of the people and teachers of the state, it gives me unbounded pleasure to give you welcome to Florida.

The same cordial greeting is extended to you who have journeyed almost across the continent from north to south as to our immediate neighbors, wrestling with problems and conditions similar to our own.

We come together in council to confer about matters alike dear to us, and, since the country is to be what the schools shall make it, to determine how we can best secure the perpetuity of our republican institutions, and render wiser and happier the people of every condition in our common country.

We admire the educational enthusiasm of our brethren from the north, expect to profit by learning their way to success in popular education, and are especially glad of the opportunity to reciprocate some of the kind treatment enjoyed at their hands while among them on occasions similar to this.

After visiting your section and learning more of your people, we have always found ourselves more in sympathy and in love with you. We now rejoice that we have been able to entice so many of you down into the far south, where we will arrange for you to come often in mid-winter unless the designs of some of us fail, hoping that you may be affected by a better knowledge of the South and her people, and the peculiar problems confronting them, as we were by a better knowledge of you.

The white people of every section of our great country are proud of a common ancestry who fought side by side to leave to us the heritage of the best government the world ever saw; and it is now worthy the ambition and efforts of teachers, who are responsible for the intelligence and largely the prejudices of the next generation, to look to the protection of American institutions, and see that the sons are as united as were their fathers.

The welfare of no other race or nationality should entice the South into any alliance detrimental to the North, nor should the North forget the Anglo-Saxon blood of the South in her efforts to promote the interest of any people under the sun.

What matters it that our immediate fathers had a family difficulty? Many families have their little dissensions, and are all the more loving when the quarrel is over.

Relying too confidently upon the work of her colleges and the old private academies, the south, it is true, lagged behind for a time in the matter of public education. This backwardness was due in part to the existence of another institution incompatible with popular education, and in part, also, to the sparseness of population.

But the cannons of civil war had hardly ceased to roar before the people in the midst of poverty and misery which their own children and few at the North will ever comprehend, finding themselves unable to educate otherwise, began taxing themselves for the education of their own children and for that of their former slaves. They paid for schools for both races, and it was too often the case that the white boy ploughed to pay the tax while the negro boy sat in the school.

Under such conditions you could hardly expect the public-school system to develop rapidly; but it delights us to inform you that "the schoolmaster is abroad in the land" today, and it is being invaded by an army of school teachers whose silent, yet powerful tread, is shaking to the earth the walls encircling the Jericho of old prejudices and overthrowing the strongholds of error and ignorance.

The South cannot boast of the present *status*, but it is exceedingly proud of the progress made in the past fifteen years. Our honored Commissioner of Education, by his address at Atlanta, now published in the Proceedings of the National Educational Association of 1895, has placed the whole South under a debt of gratitude to him which we know not how to pay, unless it be to petition the next president to retain him in the position he has filled in a most masterful way.

While extremely grateful for our part of the exposition of the facts showing the progress of the South in education, Florida is yet a little ambitious to be contrasted with the general showing that is made when she is grouped with her larger sisters south of the Ohio, and extending from Virginia to Texas. It may not be known that Florida, though sparse in population and feeble in taxable resources, yet arrogates to herself leadership in her section on many important counts in common-school education.

I was informed by our President that the picket line must fire their small arms quickly and fall back to make room for the unlimbering of the heavy artillery, but I believe this audience will accord me five minutes to make good the claim of Florida by a recital of some statistics reduced to as few figures as possible. The record of the school year 1892-3, the latest date obtainable, as published in the report of the commissioner of education, is used. Sometimes the data for

Florida is taken from the report of the year 1893-4, as the report of the year previous is not full and complete. Another fact to be remembered is that the school age of the group is reduced to the basis of five to eighteen, while that for Florida is from six to twenty-one; evidently a disadvantage in the showing, as only a small per cent over eighteen years of age go to school.

For the sake of brevity I will merely mention the points of comparison, the average per cent made by the group of ten states, including Florida, and the average made by the latter alone. The ten states are North Carolina, South Carolina, Tennessee, Kentucky, Arkansas, Mississippi, Alabama, Georgia, Florida, and Louisiana.

The first number in every case refers to the group, the latter to Florida alone.

1. In the number of pupils enrolled in the common schools in every hundred of population the showing is 61 to 66—the latter more than Rhode Island or New Jersey, and nearly the same as Pennsylvania. Divided as to race, the showing would be 74 for the whites and 57 for the negroes. Counting the whites alone, it is five points higher than the average for the United States. If it be desired to do justice to the whites of the south, the fact must always be borne in mind that the poverty and indifference of the negro discounts all statistics on questions of merit.

2. Average attendance of pupils as compared with the enrollment is 62 to 66—the latter a small fraction larger than the average in the United States, and greater than in Connecticut, New York, or New Jersey.

3. Average length of school term in days, 87.3 to 105; that is, Florida gave her children within a fraction of eighteen days more schooling in a year than did the whole group of states.

4. Percentage of female teachers, 47.1 to 56.7. This fact may show that the children were taught more conscientiously and industriously in the latter, because a larger percentage of Florida's teachers were females.

5. On account of blanks in the reports of three of the states, it was impossible to make a just comparison of the salaries paid teachers. Suffice it to say, that the average monthly salaries paid females, white and colored, in Florida, was greater than the average salary paid in either of the seven states reporting, and was only \$4.46 less than the average salary paid females in the United States. Monthly salary paid males in the seven states, \$31.68, to Florida, \$35.50.

6. Amount of school fund raised per taxpayer, \$3.86 to \$5.08.

7. Amount of school fund raised *per capita* of school population, \$2.53 to \$3.76. Lest our own people become too well satisfied with this exhibit, I give the amount raised *per capita* of school population

in three other states—in Massachusetts \$17.91, Montana \$21.50, Colorado \$22.98.

8. Average yearly expenditure for common schools *per capita* of population, 0.836 cents to Florida, \$1.25. Average for the United States, \$2.47.

9. Average yearly expenditure per pupil, \$6.40 to \$8.82.

I also read, to prevent too much local pride: The above average for the United States is \$18.45 for Massachusetts \$33.24, Montana \$43.44, Colorado \$41.34. These latter facts so completely overshadow the small satisfaction of leading our immediate sister states that we cease the comparison.

It was not our aim to boast of the little that has been done in our state, but to call attention to the facts, liable to be overlooked, because Florida is not yet one of the populous and wealthy states of the Union.

The public-school system in this state was legally twenty-seven years old the thirtieth day of January last, but it gave little evidence of life and did not begin to take root and begin to grow into the affections of the people until ten years later, so it is today but in its swaddling clothes.

As late as 1876 it may be said that there was not a school for higher education in the state, though there were two seminaries in name that were practically graded schools. We have no Harvard University, but a State Agricultural and Mechanical College, East and West Florida seminaries, two state normal colleges (one each for white and black) the South Florida Military and Educational Institute, two independent normals, and three denominational colleges—John B. Stetson University (Baptist), Rollins College (Congregationalist), and the Florida Conference College (Methodist)—all giving higher education and enrolling altogether about 1200 students.

Our public-school system is unique and adapted to the conditions prevailing in our state. I would like to give its main features, but the injunction to be brief continually rings in my ears. Suffice it to say that ours is the county system, allowing certain district features. Except as to the constitutional one-mill state tax, the county is the financial unit—all citizens bearing equally the burden of taxation, except when a district votes to levy a special tax in supplement of the apportionment received from the country.

The county school levy is fixed by the constitution between a minimum of three and a maximum of five mills. The maximum district levy is three mills. As evidence of the willingness of the people to be taxed for schools, a majority of the counties levy the maximum of five mills, only three being satisfied with the minimum.

Many districts levy the special tax, thus paying nine mills tax for educational purposes, including state tax, and apply to the same purpose all poll taxes, the payment of which is made a prerequisite to voting.

Large numbers of the brethren in black deny themselves the right of suffrage by refusing to contribute one dollar toward the education of their children.

The right to fix salaries, assign teachers, in fact, nearly all power is vested in a county board of three members, the executive officer of which is the county superintendent of public instruction.

The state uniform examination of teachers is in successful operation, and is doing much toward raising the standard of teachers. Summer schools under state auspices are held yearly, and monthly county institutes are conducted in most of the counties, both helping to improve our teaching force.

All concede that the negro should be educated, and the people bow gracefully to receive and cheerfully carry the load of taxation for the education of all. It can be truthfully said that there is not a child in the state, white or black, but that is within reach of a school and can obtain from sixty to 120 months' schooling at public expense if he will only avail himself of the privilege.

The negro is treated more than fairly in the matter of education as statistics will prove. Some are skeptical as to the value he will derive from it. At any rate, we do not desire the help or intervention in his education of persons knowing nothing practically of the race, and who do not propose to live with the condition of affairs they would create. They must be educated in their own separate schools. Their future in the South is a difficult problem that must be solved by the South; and there is in her enough patriotism, enough humanity, enough Christianity, and sufficient wisdom to solve it on the principles of philanthropy to the best interests of the race and to the good of the common country.

We pray that no fanatic be encouraged to intermeddle for our molestation and the injury of that people.

I should like to tell you of some of the difficulties we have to contend with; but, as that would be making public family secrets, I desist. Suffice it to say that here, as elsewhere, like the poor, we have always with us the inefficient officer, the indifferent and unqualified teacher, the meddling politician, and the legislatures "born short" on questions of public school economy.

Again I bid you welcome to our growing state, our beautiful city, our genial climate, and to the warm hearts and outflowing hospitality of a generous and noble people.

PAPERS AND DISCUSSIONS.

WHAT IS THE TRUE FUNCTION OR ESSENCE OF SUPERVISION?

BY C. A. BABCOCK, SUPERINTENDENT OF SCHOOLS, OIL CITY, PA.

The superintendence of all kinds of work seems to divide itself naturally into two parts. First, the general direction of the effort must be determined—the object to be gained must be conceived; and secondly, there must be a guidance along the way—the means necessary to the attainment of the end must be discovered and used. The true function of school supervision consists in the formation of a right ideal of education and in the use of the best means to realize that ideal.

The ideal accepted will determine to a great degree the character of all the means taken to reach the end, just as knowledge of the destination will control even the first steps of a journey. Is it not evident that those who would direct aright even the beginnings of the educational process should have a comprehensive view of the end sought? "Our reach should be wider than our grasp." Many, perhaps the majority, regard education as of value only for its utility, and would limit it to those subjects that are of immediate use in the practice of some craft, or to the knowledge that is essential to the carrying on of business. Arithmetic, reading, writing, and geography are necessary to the world's commerce, for without these it must cease. Astronomy and the mathematics for their application to navigation and to the measurement of land, and the physical sciences, for their utility in manufacturing, are also recognized as needed branches of knowledge.

Further examination might prove the value for use of many, if not of most, of the subjects of study.

The trouble with the argument for utility is, that it can never conclude. It leaves its advocates at different points of the ascent, each with his theory limited to his own particular range of vision. What he cannot see to be of use he does not think worth acquiring. It thus begets an economical habit of thought concerning knowledge, and tends to a narrow view of life; at the best, a kind of tinker's philosophy, which considers the man of less importance than his job.

But there is another doctrine, and a better one. It regards the man of more significance than any special work he may do, and therefore makes it the province of education to develop him. It seeks by training to give to the mind the full possession of its own powers. It regards the attainment of knowledge as in itself valuable, shows its necessity, and is therefore most vigorous in its pursuit. The utilitarian argument drops out of sight, because it is found that the knowledge which is sought most eagerly—as if its acquirement were the only end in view, its mere possession the sole reward of the effort—is more useful, produces more power, than that which is obtained for some special application.

Confronting every human being is the unknown world. To comprehend this world in terms of its own thought is the task fate sets for every soul.

Only as the child becomes acquainted with the objects around him, and begins to know them, does he begin to live. Only as the man discerns the thought underlying the objects of the material world, and makes it his own, does he acquire any power over that world or does it hold any meaning for him. The world of the present or of history has no existence for him who does not re-think it. There are, it is true, inherited tendencies, but there is no inherited knowledge. Each mind has only what it conquers for itself, and each conquest is a larger realization of itself. This movement of life to still larger life, when it is once fairly begun, is felt to be necessary. Its sway over humanity is as sure and as universal as the uplift of the moon upon the sea. Each mind also feels the necessity of struggling forward; is continually prompted to appropriate greater truth by identifying itself with it. Whatever touches the life of man—his inner spirit—to finer issues, helps forward the incessant effort to reach better, more complete life, is culture. Culture is not a completed product or possession. It is rather a tendency or habitude of the mind. We believe that education to be the true one which aims at culture, or the promotion of the cultural tendency. It will not seek to develop a few special aptitudes, but will consider all the needs of the man from the widest generalizations of experience and of philosophy. It will picture a cultured intelligence, "full summed in all its power," as the crown of all educational effort, and though at times it may give more minute attention to other things, it will still keep this picture in sight.

Secondly, it is the function of supervision to use the means necessary to the realization of the ideal; or to organize courses of study, and to see that they are adapted by instruction to the varying capacities of children. This requires, first of all, a knowledge of children.

A good deal has been accomplished in child study recently by the experts.

- Supervision needs not only to know the results of this study, but to verify them. A knowledge of childhood which is built up simply of general terms, each involving many experiments that are performed by others, will probably be as vague and indistinct as Comenius' picture of the soul in his "Orbis Pictus." It may have form, but not much content. The results of child study will be available only to him who studies children. Great caution should be exercised in forming general conceptions about "the child," or any such general concept as "the child." There is no child in general, any more than there is a horse in general. Without attempting to settle the old dispute between the nominalists and realists, we will say that if there is a general horse, containing within itself the properties of all horses, no one has yet seen or driven it. So, children we may know and teach, but "the child" never. That is a shadowy term; a kind of metaphysical spook, whose claims to consideration must always give way before the children.

Childhood is a distinct period; as different, almost, from that which immediately follows it as the blossom is from the unripe fruit. Children are almost as much a part of nature as the squirrels or the birds; almost as much at one with her. It is a time "of splendor in the grass; of glory in the flower." Nature makes a delight for the child out of what would be otherwise a hard task—the development of his physical and mental powers by continuous and vigorous exercise. She does this by calling it play. It is doubtful if the common achievements of the first four years of childhood have ever been surpassed by the greatest genius, in the same time, at a later period. In that time most children have learned a language which they will speak well or ill according to the models they have had, and they have learned many of the properties of the most common things. All things are new to the child, and therefore his interest is intense in them. He sees everything in the halo of the morning light. Every day is indeed an epoch to him. He pursues every investigation which has received the impulse of interest with the industry of a detective. As an illustration of how much children will accomplish when excited by curiosity, permit this description of the experience of a three-year-old boy in learning to read, as told by his mother:

"Upon the wall of the storeroom some one had scratched 'M', and Lucius was very desirous to know what it was; also, what it was for. I evaded telling, not intending that he should know for some time that there were such things as letters. But one day I told him the name, and to his further query told him it was a part of some

word—the first part of ‘mamma,’—and was used in other words. He then wanted M for ‘Lucius,’ but I told him that would not be right. ‘What would be right?’ I answered, ‘The first letter of Lucius is ‘L.’ ‘Make it, mamma.’ I did so, hoping his curiosity would be satisfied. A few days later he announces he has found ‘M’ and ‘L’ on the hearth of the stove, and a whole lot more. ‘What are these other letters?’ Being some little distance from me his questions contained descriptions. ‘What is the round one? Round one with a hole in one side? Another round one with a hole in its side and a mark on it?’ Without much hesitation I replied, ‘O, C, G.’ ‘Here is one round at the bottom and open at the top; another one open at the top but not round at the bottom.’ It is not strange that he easily remembered U and V’ since he had noted their peculiarities and compared them with the others before asking about them. “One day he said, ‘Why are O and I and L together so many times?’ He had seen them in papers and on so many places that he thought there must be a why.’ I tell him the word and soon he has the word ‘gas’ in the same way. These two were the first he knew as words, but they were soon followed by many others, though I think no one encouraged him or gave him any help he did not well earn.

“His attention was soon attracted to the small letters. ‘What are these others, and why are they so different?’ he asked. He was told that there were two kinds of letters, and he began the same process of hunting down the small letters that he had pursued with the capitals. Now, after about three months of quizzing his mother, he can read fairly well, though he makes some queer mistakes in pronunciation. Care was taken never to give him any information that was not first sought by him.”

This is not given as an illustration of the most desirable method of teaching reading, but of how great progress a child may make along the line of his interests. Undoubtedly if learning to read had been forced upon him it would have proved irksome, and the same result would have been reached after a great deal of worry and with a much greater expenditure of force.

Supervision must so direct the teaching force that it will feel the necessity of knowing children, of learning what they know, how they may be influenced, and what they care for before it attempts to guide them. The interests of children furnish the surest clue for their guidance. If they were set to studying objects for which they care—and to find such is not difficult, for they are intensely interested in all natural things—almost the whole primary course of instruction would grow easily out of this study. They would learn to observe accurately, to verify their observations, and to record them correctly.

They would learn to read, impelled by the natural desire of gaining information.

By the side of this work would naturally belong the humanistic studies—the lives of great men, the early history of our own country, and how it came to be what it is; and, finally, literature as the art of expression, the voicing of truth and emotion in fitting forms. Besides its own intrinsic value, this course of work also furnishes the most appropriate introduction to the secondary schools.

Courses of study also need revision. The old common school course, consisting mainly of the three R's, has been called a narrow stream, but one which flowed with a strong, deep current. Whether it was strong and deep or not, it was certainly narrow. Compared with it many modern courses may be said to have broadened out or to have flattened out into swamps. There must be condensation; some branches must be dropped, and only those retained which naturally assist each other and which are necessary to the cultural needs of the learner. The course may also be shortened as a whole by substitution. Much of the work in arithmetic is more difficult and abstract than some of the work in algebra, and these may properly change places. Considerable of the time spent upon technical grammar might be much more profitably spent upon French and Latin, as recommended by the Committee of Fifteen. We have great hope of help in this direction from the attention which is now being given to the composition of courses as determined by the relations of the separate studies.

It is also the function of supervision to look after the interests of the individual while dealing with masses. Companies of learners cannot march through a curriculum and all arrive at the same time. The course of studies may be "nailed to the calendar," but the children should not be. A certain amount of work may be assigned to each grade or year's work, but the pupils in each grade may be divided into groups, the greater number of groups being formed in the lowest grades and diminishing to two in the upper grades. The individuals of each group may be changed as often as may be necessary. Each group progresses as rapidly as it is able, passing the yearly limits when the work is done, and not necessarily at the end of June. If it be objected that this plan of grouping means short recitations, the reply is that a child of six years of age or less will learn as much of one subject in a short time as he would were he to devote all day to that subject. His mind refuses to act very long in any one direction; for him "change is rest." As the child advances in years or progresses in the course, the time of the recitation will be lengthened.

The plan proposed arranges for five classes or groups in the first year, four in the second and third, three in the fourth, and two in each of the succeeding. This would in a large measure do away with the discouragement which often results from sending a pupil back to do over again a half or a whole year's work because he has failed at the end.

Finally, it is the essence of supervision to so organize instruction that the efforts of both teachers and pupils may harmonize and secure to the learner the highest results in culture.

The course which makes culture its aim is the best preparation for life which those students can get who do not complete it but who are compelled to drop out at different stages of advancement. Their faces are set in the right direction, and they have been guided awhile along the true path.

DISCUSSION.

SUPERINTENDENT F. TREUDLEY, Youngstown, Ohio.—It may be a commonplace statement, and yet I do not know how better to express my thought than by saying that the function of supervision is to realize in practice the ideals of the supervisor. In this respect it is like all work to which the race puts its hands. The business man sees in his growing business the realization of long-cherished ideas. The scientist works out the dim visions that come to him and at last gives to them tangible form.

The artist, whether he be a poet, giving to his dreams "a local habitation and a name;" a sculptor, impressing upon marble the forms embodied by his imagination; an architect, rearing to heaven his splendid conception of what is fitting in God's worship; a painter, setting forth his thoughts of life and death; a musician, delighting the ear with matchless harmonies—all these, alike, are engrossed in the sole aim of realizing, in tangible forms, what they deem of most worth.

In this respect the work of supervision is in common with all other occupations. From many, however, it differs widely, both in the agencies with which it works and in the material upon which it works.

It differs in the agencies, for those of the supervisor are men and women, varying in aptitude and capacity for their work. And hence, as a pursuit, the work of supervision is difficult, baffling, uncertain; peculiarly prone to yielding ground for discouragement, because one cannot always clearly determine what he has accomplished or the degree to which the products of manhood or womanhood belong to him, or to the teacher, or to the many agencies engaged, by divine appointment, in the education of youth.

The supervisor's work belongs to a realm less visible to the eye than that of occupations engaged upon a different material. He deals with that which is more delicate and refined. But herein is lent a worth of peculiar quality, imparting an almost divine aspect. Because, whereas in other pursuits the work once done is done forever (an immortal work of art may be a discovery, an invention), the work of the teacher, the supervisor grows, changes into more beautiful forms as the soul co-operates all through life—and, may be, through eternity—with that

influence which at an early stage sought to mold it. For life can pass into life to quicken it, invigorate it, enlarge it, uplift it, speed it on its work of self-fulfillment. A teacher may impress upon his pupil a form of life into which he will grow, not as a statue out of marble, but rather as an oak tree out of an acorn—a work of Deity. And herein life seems to share in the possession of creative power.

I have answered thus imperfectly the question, in part, from the standpoint of my view; for the function of a faculty or power is defined as its natural or assigned action. It is the function of the eye to see. It is the function of supervision to realize in human life its ideals.

What more is vital to this question? Two elements are of infinite importance.

1. The quality and worth of the supervisor's ideals.
2. Whether, these being worthy, he can incorporate in practice the thought embodied in these words of Lowell, "Endurance is the crowning quality and patience all the passion of great hearts." And first, let me remark upon the ideals of the supervisor.

Does one ask what is the crowning evil or weakness of supervision? I will answer in a word. It is the combination of power with low ideals as to the purpose of education. I have heard many times the tribute—and a just one, too—paid in this department to the influence of the superintendents of this country upon the future of public-school education. But often it may be said of teachers, when one thinks of what stands for supervision over them, "Thou art mated to a clown, and the grossness of his nature will have weight to drag thee down." I recall Arnold's statement to the effect that he knew no sight more pitiable than the yoking of a bright, gifted boy to the neck of an incompetent teacher. I recall the words attributed to Napoleon, "Better an army of deer led by a lion than an army of lions led by a deer."

Now, briefly, what are some worthy thoughts of the supervisor's work? That power is more than knowledge? Agreed. That character is the end of life? Agreed, if it be modified to meet the saying of Richter, "I have made out of my life all that the stuff would admit of." But what is character? Who are educated? One has said, "We are the residuum of all that we have done, or felt, or thought," implying that the end of education is the securing of a noble residuum. To come down to more concrete and minute examples. Our pupils are said to be able to read perhaps fluently, but not tenderly, thoughtfully, appreciatively. They are said to know the forms of things; not to realize their contents. They are said to have "eyes which see not; ears which hear not;" it having been forgotten that eye and ear must be attached to the soul if they would perform the work for which they were created. Are these commonplaces? Granted. It is the business of life to invest the commonplace with significance.

Education means the conversion of one's seeing "in a glass darkly" into the "seeing as face to face." Education means the realization, as by Peter of old, that "what God hath cleansed" we are not to call "common or unclean." And what is common or unclean upon which his hand has rested? Nay; true education is identical with religion as defined by Jonathan Edwards, consisting of "ability to know what things are really great; what things are really small."

True education is the cleansing of the world for man. It is the taking of nature out of the commonplace and making it glad with intelligence, with thought, with love. It is the peopling of streams, of fountains, of woods, of meadows with greater than the divinities of Grecian mythology—with God himself. It is the investiture of man with the glory of his birthright; for, if one turns to human relations and human endowments, education is again the ideas of Her-

bart, those ideas of freedom, of efficiency of the will, of good will, of equity, of justice, which, once gained, make their possessor immortal and earth a vestibule of heaven.

The fact is our best teachers stand round about us on every side. It is but the simple truth that principalities and powers stretch out toward heaven from every individual.

Archimedes once said, "Give me where to stand and I will move the world." Is there such a place? Verily. Where a man stands is the place of power or weakness. And Emerson expressed it when he said that if we would make ourselves sound and self-sufficient we would be felt to the uttermost parts of the universe.

Suppose, now, that by thought, meditation, the reading of great books, communion with noble souls, praying to a great Father—not a being dragged to the human level but the Maker of heaven and earth, and one who has said, "If a man lack wisdom, let him ask of God who giveth to all men liberally and upbraideth not, and it shall be given,"—the supervisor comes to his kingdom, what then? What then? The world becomes invested with significance and life filled with perennial interest and charm.

Then childhood begins to receive its proper investiture. Possibilities expand. Self-complacency, conceit, narrowness, pride—the pride which Emerson called the soul's curse—fly out of the soul as bats out of lighted chambers.

Then what does the supervisor become? He becomes a healer of souls; a bringer of sunshine; one whose feet are as the feet of messengers of peace upon the mountains; a presence with anointing oil summoning some ruddy shepherd boy from the flock, and sending him along a career, shining more and more unto the perfect day. This is the very essence of supervision, for here is power. It is the power which transforms the world; better yet, transfigures it. It is the power that Dante felt when treading with Virgil the Inferno; that power manifested when thought and will are one.

What more can be said? Many things. But these two must be said, viz.: First, that the great objective point of the supervisor's art and power must be the teacher, for whom he must have sympathy, and to whom and to whose work he must apply the law of compensation, remembering that, while to some are given gifts of intellect, so that they can "rightly divide the word," to others are given the power to apply truth, and possessed of a grace of manner and a charm of disposition, are able to realize the notable utterance, "Out of the heart are the issues of life." All this, for "as the teacher so the school." And second, and lastly, it must be said that the supervisor, in common with the teacher, must dwell with children if he would receive perennial strength.

There is a deep and abiding truth in Dr. Parkhurst's description of teaching as being an incarnation, a descent to narrow limits in order to lift life up, in illustration of which he cited the Oxford professor who so loved his little child of feeble mind that, daily, he descended to his narrow limits until he lifted him up to bear off a prize at Oxford. We speak reverently here, but we speak truthfully. The power of the Great Teacher was anticipated in Socrates surrounded by Athenian youth. It was illustrated in Pestalozzi kneeling beside the beds of his orphan children at Stanz and teaching them until they fell asleep. It was illustrated in the person of Dr. Howe, when he descended through a single sense into the narrow life of Laura Bridgman, and led it out into a marvelous light. But, ah, the reward of it, the glory of it! Life here and life forever with Him who set the great example, and who gave to us this saying, "Unless ye become as little children, ye cannot enter the kingdom of heaven."

SUPERINTENDENT J. H. PHILLIPS, Birmingham, Ala.—The spiritual element as an essential characteristic in efficient supervision has been eloquently presented and forcibly emphasized in the discussion of this topic. To all this we most cordially assent, but we should not overlook the fact that the essence of school supervision implies other and more practical phases. I wish, therefore, to call attention briefly to the practical element in supervision. Contact with actual conditions as found in the average school system, managed by an average board of education, is not calculated, I fear, to develop the spiritual nature of the average superintendent.

The topic as given in the programme would suggest that there is some one essential function or essence that must characterize all school supervision, including that of several provinces widely differing in their requirements, such as state supervision, county supervision, city supervision, and the supervision of a single school. If we eliminate all elements of difference in these several spheres of supervision, and reduce those requirements common to all into a single essence or function, what shall that function be denominated? It would seem to me that the essential essence of all school supervision is intelligent, sympathetic, and conservative leadership. This characteristic must be a primary qualification in every sphere of school supervision.

If we undertake to describe more in detail the practical phases of this essential element, I would point out, first of all, what I may call the pedagogical function. The superintendent must be able to lead his teachers in the actual work of the schoolroom. Professional skill and practical common sense are here indispensable. In the next place may be mentioned the executive function. The superintendent must commend himself to the school authorities as well as to the public by his business qualifications. He must have the ability to manage, if necessary, the business affairs of the school in a thorough, efficient, and also in an economical manner. He must be a good business man. Again, I would mention, with some degree of diffidence, a phase that most superintendents are compelled to recognize—the political function. The superintendent of a city school system, or of a state school system, if he be successful in accomplishing anything, is forced to be, within his particular sphere, a tactful politician. He must come in contact with politics in its various forms, and must have force of character, tact, and energy, in order to protect and advance the interests of the school. He must, from his position, advise and direct his board of education, and in order to gain and retain their confidence he must not be afraid to assume responsibility. Boards of education, as a rule, are precisely what superintendents make them. When a board of education assumes the entire control of the schools without consulting the superintendent; when it examines and appoints teachers, examines and promotes pupils, constructs courses of study, selects text-books and dictates methods, it is because some feeble superintendent, too weak or timid to assume responsibility, has shirked his duties and placed them in the hands of the board. History shows that when power is once acquired by any body of men that power is yielded with great reluctance. Boards of education must, as a rule, get their conceptions of school management through the superintendent, and superintendents are responsible largely for the deplorable conditions found in many school systems. The school superintendent, if he is fitted by nature and education for his position, must meet the conditions and requirements of educational leadership, and must be courageous enough to assume the responsibility such leadership entails.

*WHAT IS THE THE BEST USE THAT CAN BE MADE
OF THE GRADE MEETING?*

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It may seem unnecessary to state that the purpose of education is physical and spiritual growth. On this point there is practically perfect concentration of opinion. While general unanimity as to purpose exists, unanimity as to the processes and methods of education is far from being a universal fact. While all desire and seek the same end, there are disagreeing, if not conflicting theories concerning the means by which the end sought may be most successfully and expeditiously attained.

During the present decade educational minds have been exceedingly active in the attempt to raise all forms of educative work to a higher plane, more completely in accord with the accurately determined and clearly expressed psychological ideas of the day. It is one of the most hopeful signs of the times to the leaders of thought in the educational world that the study of mind, in all its varied forms of activity, is so earnestly and generally pursued on account of its practical bearing on the work of the schoolroom. The natural order of mental development, the action of the mind under the influences of its more or less fixed or ever-changing environment, its tendencies in different stages of development, the regulation and proper direction of its ceaseless activity, especially during school life, have become subjects of absorbing interest and of paramount importance to a constantly increasing number of teachers in the elementary schools of our country. It may still, however, be safely assumed to be true, that a large proportion of elementary teachers, even in cities, has received but little instruction of a strictly professional character as a preparation for rational and efficient service. Normal schools and schools of pedagogy are becoming more numerous, but their graduates, though annually increasing in number, constitute at present but a small fraction of the great army of teachers employed in our public schools. The deficiency in normal or pedagogical training must be supplied, if supplied at all, by the supplementary work of other agencies having in view a similar purpose. Among the notable instrumentalities of the improvement of teachers and increasing the value of the work done in elementary schools may be mentioned university extension, the summer school, the state association, the county insti-

tute, and the teachers' reading circle. These agencies, working in different ways for accomplishing the same end, have inspired many teachers with a desire for progress and self-improvement, which have acted very beneficially on the schools with which they are connected.

At this hour I have been requested to consider the teachers' grade meeting as a means of modifying and improving educational work. Education, it is true, is a continuous process from the beginning to the end of life, and the multifarious influences, direct and indirect, which make for education in one form or another are continuously active, more especially during the period of childhood and youth. There is a natural sequence in the development of mental power to which all educational methods and processes must conform if the great purpose of education is to be accomplished even to a moderate extent; and the division of this most important period of intellectual growth into subperiods, each requiring mental action in kind and degree appropriate to the developing soul of the pupil as suggested by a close and accurate observation of nature, is based upon a world-wide experience.

The arrangement of pupils in grades is followed by a corresponding classification of teachers when practicable. As in the industrial world, so in the sphere of educational activity, the division of labor has come to be recognized as of paramount importance. Whether the application of this principle, so efficient in the production of material things, to educational work is wise or unwise is, in the minds of many competent judges, a question not yet satisfactorily answered. But the grades we have; grades of pupils, grades of teachers. Has the graded school attained the highest degree of efficiency, or is there a plane of nobler achievement than that on which the best of such schools now stand?

If our graded schools are to become more efficient in the production of results most to be desired, the grade teachers upon whom the work of instruction chiefly devolves must become more thoroughly acquainted with the true principles and the natural methods of teaching. Not only must knowledge of educational principles be more widely diffused, but skill in their successful application much less rare than it is now. The great and rapidly increasing body of elementary teachers must also be inspired with a desire to perform their work more efficiently and to utilize to the utmost every available means, every accessible source of power, for the realization of that desire.

Before considering the utilities of the grade meeting as a means of rationalizing—perhaps, revolutionizing—the processes of teaching prevalent in many graded schools, it may be well to survey hastily some of the marked defects observable in such schools.

With all the obvious and manifold advantages of the graded system, defects exist which must be corrected or eliminated before the system can produce satisfactory educational results. One of the prominent defects which the intelligent observer perceives in the graded school is the want of unity of purpose, the lack of continuity of effort, of many teachers through whose hands pupils pass in their progress from grade to grade. This defect is one of serious import. It happens too frequently that the results of the excellent work of one teacher (excellent because based on well-established psychological principles) are largely neutralized by the unscientific methods of her successor in the grade above, to whom her pupils pass by promotion.

A second defect in graded work arises from the observed tendencies of teachers to become isolated, independent factors in the system of which they form a part. They survey, not the whole field of instruction, as defined by the course of study, but only a limited part of it. They perceive no sequence of steps determined by the laws of mind. They perceive no connection between the work of their grade and that of preceding and succeeding ones. They fail to recognize the educational relation which one period of school life bears to another. The combined work of such teachers is fragmentary, and its results in every way unsatisfactory.

Much of the inefficient work existing in graded schools must be attributed to the inefficient preparation of grade teachers in scholarship and professional training. Skill in teaching requires not only a knowledge of educational means which may be supplied by a broad and deep scholarship, but an eminent ability to use such means wisely and efficiently, which may be secured in a large measure by proper professional training.

Without further digression, let us seek to ascertain in what way these and other defects of our elementary schools may be corrected and their work be made continuously good from its inception to its close. As is the teacher so is the school. If the schools are to be improved, such improvement must come through improved teachers. Prominent among the agencies for the improvement of teachers, more extensively employed than any other, is the grade meeting. Its elements are homogeneous. The work to be performed by its members is practically the same in scope and detail. All deal with minds in about the same stage of development, and may pursue virtually the same educative course, unless individual peculiarities make deviation desirable or necessary. No situation could be more favorable for developing and communicating educational ideas and methods. The grade meetings of any system of schools are under the immediate supervision of the superintendent. In them he finds the most

favorable medium through which to infuse his own spirit into and impress his educational views upon his teachers. The best results of his study, observation, and experience may be set forth here in the most effectual way, with a reasonable assurance that they will be cordially received by those whom he seeks to benefit, and materially improve the schools under his direction. He may call into the service of the meeting the brightest and best of his own corps of instructors. He may summon to his aid colaborers from other educational fields whose enthusiasm and ability fit them to inspire with energy and love of progress all with whom they may come in professional contact.

The richest fruits which the grade meeting is capable of yielding cannot be secured in the absence of sympathy between the superintendent and his teachers. There is no place in the field of educational work in which concord of sentiment and purpose is more essential to success. Sympathy here is as necessary as in the school-room between teacher and pupil. The want of it begets lack of interest and failure more or less complete. Hence the leader of the grade meeting should seek to bring into unison with his own mind the minds of those through whom he would raise his schools to a higher level of educational efficiency. Many a grade meeting has closed without inspiring those in attendance with a nobler purpose or empowering them to do a broader and more effectual work. Through want of sympathy the benefit that might accrue from the varied experience, the extended observation, the profound study of the leader cannot be realized.

The purpose of the grade meeting should be clearly defined, and its plans systematically formed. The leader's knowledge of principles, methods, and management should be such as to command the respect and approval of those whose efficiency he aims to increase, whose service as educators he purposes to render more valuable through the application of more rational principles and the adoption of more scientific methods. He should secure and retain the earnest co-operation of those with whom he works. His instruction should be clear and intelligible. He should neither soar to heights unattainable nor journey to regions inaccessible to many of his audience. The rich fruitage he would have them gather must not hang too high. Grapes, however luscious, beyond the reach of those who would pluck them are always worthless. The leader's manner should be persuasive, conciliatory, winning. His criticisms of defective skill, the use of wrong methods, the misapplication of right ones, which may have come under his observation, should be earnest and frank, but so sympathetic as to excite rather than extinguish hope. It should be assumed that all present have learned valuable lessons from experi-

ence, furnishing an excellent basis for better work in future. The grade meeting should not be an occasion for a display of the wit and humor of him who conducts it. Valuable time may be wasted, thought dissipated, attention diverted from essential matter by indulgence in mere pleasantries—entertaining, perhaps, but valueless. An earnest spirit of inquiry, a sincere desire for progress, a determination to engage heartily in such intellectual work as may be necessary to accomplish the objects proposed should characterize all present. To this end the energies of the leader, in fullest and freest play, should be directed.

All varieties of school work form appropriate subjects for discussion at the meeting under consideration. The kind and quantity of work for each grade having been determined by the course of study, the grade meeting becomes an important, perhaps necessary, means of so directing the efforts of teachers that the best results attainable may be secured. To one conductor of grade meetings it may appear most desirable that all instruction should have an immediate and so-called practical bearing on the exercises of the schoolroom prescribed by the programme. To him methods of instruction would seem to be the most appropriate subjects for consideration. To another the psychological principles on which all effectual teaching is based seem of first importance. Perhaps the path of greatest usefulness would be a resultant arising from due consideration of both of these conceptions. There can be no doubt that psychological study should form a prominent feature of the work in contemplation. Happily methods devised by others are less frequently than formerly presented for unquestioned adoption. The more generally approved way is to acquaint teachers so thoroughly with the laws of mental action and growth that they will be able to devise such methods of instruction as will enable them to accomplish the best results, working in accordance with individualities and with instrumentalities largely created by themselves. Another hopeful and healthful sign of the times is the general trend of thought in the direction of basing all educative processes on the deductions of psychological study.

The usefulness of the grade meeting may be promoted by the presentation of class exercises by teachers who, through the possession of clear and practical psychological knowledge and special skill, have acquired marked success. To some teachers the observation of a little excellent practical work is more valuable than much of the most elaborate theoretical instruction. They cannot from the clearest oral presentation of pedagogical principles construct a satisfactory ideal of class work. Without becoming mere imitators, they may be

greatly aided by such practical exhibitions of skill. With due allowance for the admitted evils of so-called show work, one may easily believe that valuable suggestions may be derived from such exercises.

While it may be generally admitted that methods and principles of teaching should form the distinctive and dominant feature of the grade meeting, it is not difficult to conceive that one of its best uses is the enlargement of the general or special scholarship of its members. Any form of class or recitative exercise that would accomplish this result might give an impetus to study and investigation in the lines of pedagogical work that would be productive of notably beneficial effects on the usual exercises of the schoolroom. The services of a well-balanced specialist might occasionally be secured to supplement the superintendent's work in this direction and give greater utility to the meeting.

A line of theoretical or practical thought may be suggested at one meeting for general consideration at the next. Pedagogic and other forms of educational literature are so numerous, excellent, and available, that few, if any, imbued with a progressive spirit, will encounter much difficulty in making the needed preparation for such an exercise. The educational journals of the country teem with valuable information concerning every phase and feature of school work, and their cheapness puts them within the reach of the teacher of the remotest district, of the recipient of the smallest salary.

Short talks by previously appointed members, on topics of their own selection and within the limits of their respective grades, often add interest to and increase the usefulness of the grade meeting, by bringing forth numerous suggestions of much practical value, based as they are, on the most successful experience. Nothing so develops, concentrates, rectifies thought as the necessity for the accurate and effectual expression of it. Every teacher needs this power. This feature of the grade meeting affords an excellent opportunity to acquire a useful measure of it.

The query method occasionally introduced into the grade meeting may conduce to happy results. Pertinent questions may awaken in the minds of earnest teachers trains of thought often leading to a satisfactory solution of difficult and vexatious problems. Obstacles considered insurmountable, difficulties believed to be insuperable, through a deeper penetration or more comprehensive vision produced by some happy response to a fortunate query, have been readily overcome.

. As in the religious, so in the grade meeting, the experience of each may be profitable to all. This direction may sometimes be given to the meeting we are considering with singularly beneficial results.

Teachers disposed to be despondent through want of success in any department of their work may not infrequently be roused to greater and more rational exertion on learning that their co-laborers have encountered similar, perhaps greater, difficulties, achieving abundant success in the end. The great variety of circumstances and methods which a meeting of this character may place before its members can not fail to furnish some suggestions that may be usefully applied in every school represented.

A practical paper by an efficient principal may now and then be interesting and profitable to grade meetings. Such papers, free from the studied formalities and profound speculations of the association or convention address, often exert a beneficial influence, because replete with educational views and suggestions originating in the field of work in which the members themselves are engaged. The efficiency of the grade meeting would doubtless be considerably increased if principals more frequently participated in its exercises. What better way of expressing the sympathy so constantly needed by teachers in the difficulties and perplexities of their work?

One of the most important and necessary uses of the grade meeting is to enable every teacher to perform the scholastic work of her grade as efficiently as possible. To this end every subject in the prescribed course should be carefully and exhaustively studied, and the most effectual method of presentation be determined. The educative value of every subject should receive due attention, and methods of study and recitation deducible from the laws of mental action should occupy no small portion of the time of the grade meeting. The natural relation and sequence of subjects, their natural dependence, their relations as auxiliaries cannot be neglected here without detriment to the efficiency of school work. There are multifarious questions concerning school management which cannot be more fruitfully discussed or more definitely settled on what may be called a practical basis than in the grade meeting. The most elaborately woven educational theories, gathered by careful and extensive reading, having been subjected to the test of the schoolroom, may be presented, discussed, approved, or rejected, as they have stood or failed to stand the strain imposed upon them. The newest assumed educational facts may be brought into the grade meeting, and there exposed to the scrutiny of those eager for such information as can be of practical use in everyday work.

In all exercises of the grade meeting the centrifugal tendency of thought must be carefully and constantly guarded against by the leader. When all minds are vigorously held to the central idea; when

every statement made tends to the elucidation or development of that idea, the value of the grade meeting is greatly increased.

The concentrated attention of every member is necessary, that the content of the leader's directions and instructions may be fully and correctly grasped; that ignorance, partial understanding, or entire misconception of what is said may be avoided, and a fruitful source of subsequent evil be prevented.

Educational appliances may be conspicuously absent from the grade meeting, but the presence of a body of earnest teachers, conscious of their needs and defects, taught by experience the necessity of a better equipment for a better performance of their work, eager to improve every facility to enlarge their theoretical and practical knowledge, anxious to utilize every means by which their views of education and educational agencies may be extended, affords an opportunity for useful work rarely possessed by the professional school.

DISCUSSION.

SUPERINTENDENT H. E. KRATZ, Sioux City, Iowa.—It is evident to even a casual observer that at present the trend of educational thought is from the extreme of dead uniformity, on the one hand, to the other extreme of impractical individualism.

Only a few years ago the autocrat of uniformity ruled us as with a rigid rod of iron, and we bowed in meek subjection to his tyrannous decrees. System was the touchstone by which schoolroom work was tested. If it failed in this essential it was, like salt that had lost its savor, good for nothing but to be cast out and to be trodden under foot of—superintendents.

We rigidly classified the pupils according to some exact but superficial memory test. We conjured up a fictitious average pupil, through whom, we fondly believed, the exact amount that a class should do could be accurately measured. We laid out an inflexible course of study, measured by the supposed capacity of that fictitious average pupil, and religiously tried to cram that course of study down the mental æsophagus of each child, *volens volens*, without any special regard to his individual powers of assimilation.

Woe unto the teacher who dared change or adapt in the slightest degree the course of study, or modify the prescribed methods of presenting each subject! We are led to exclaim, Oh, Uniformity, what crimes have been committed against the children in thy name!

We are in danger now of rushing into the other extreme of impractical individualism. Uniformity is apparently regarded by some as an evil *per se* to be rooted out wherever found. This will certainly lead to disorganization and demoralization. A certain amount of system and order must characterize the work of our schools.

I am, however, heartily in accord with the efforts recently put forth to gain an insight into the chief characteristics of each individual pupil, so that instruc-

tion may be adapted, not to a fictitious average pupil, but as far as possible to the peculiar mental aptitude and needs of each pupil.

I also believe heartily in the view that we need more than ever before to conserve the individuality of our pupils. The time has come in our complex and highly differentiated civilization when we must more carefully study individual traits; more carefully seek out and nurture special ability and adjust students to their life work—their special niche.

In order to secure these results, a course of study must be regarded as a mere outline which the teacher is to adapt, as far as possible, to the individual requirements of each child. To give the teacher this freedom is the logical deduction of our plea for the conservation of the individuality of the pupil; and for the same reason she must be given much latitude as to the methods she employs.

In the evolution of the efficient teacher three stages can easily be traced, viz.: First, the imitative stage, which is chiefly characterized by the careful imitation of the manners, methods, and devices of some former favorite teacher. But little thought characterizes this stage. Attractive methods are industriously sought out, and eagerly swallowed without any thought of analysis or assimilation. Some teachers never evolve out of this tyro stage, and may be termed cases of arrested development.

Second, what may be termed the irrational stage, in which there is much said about pedagogical principles and doctrines and very little done along the line of their wise application. We hear about "from the concrete to the abstract," but see that order frequently reversed in the schoolroom. We hear glib talk about apperception, interest, concentration, etc., but look in vain for their intelligent application in schoolroom work. This may be characterized as a hopeful, perhaps necessary, stage in their future evolution.

Last comes the thoughtful stage, in which everything that enters into school work, whether it be principle, or material, or method, or device, is subjected first to most thoughtful scrutiny, to see whether it commends itself to the judgment, and then subjected to the still more critical test of results in the schoolroom. This is the stage that is characterized by enthusiasm, growth, progress, ever-increasing efficiency and power.

As far as teachers' meetings are concerned, the superintendent generally tries to increase the efficiency of his teachers through three kinds of meetings, viz.: First, the general teachers' meeting, held either in sections or in one body, in which his chief purpose is to stimulate his teachers to a more energetic, thoughtful, and intelligent work through a better understanding of the child and the general principles which underlie successful teaching, to inspire them with greater enthusiasm and love for the work, and to foster a stronger *esprit de corps*; second, the principals' meeting, in which he is in consultation with his principals, as his cabinet or advisers in shaping the plans of work; and last, the grade meeting.

If the work of the general and principals' meetings has been carried on as indicated, then the work of the grade meeting chiefly resolves itself into the consideration of how the subjects of that grade in whose interests the meeting has been called shall be presented.

We take it for granted that there is no need to present subject-matter in the grade meeting, except when a new subject is being introduced into the course of study. Hence the grade meeting chiefly considers the best methods of presenting to a class the subjects taught in that grade.

Shall the superintendent, having confidence in his own judgment, present what he thinks to be the best method of teaching a certain subject and insist

that his teachers strictly follow his method? A great many objections can be justly urged against such a course. Suppose the subject be primary reading. Dare he, on his own judgment, and without the searching test of schoolroom experience, insist that all his primary teachers must sink their individuality and rigidly follow his method? Such a course as that would almost certainly invite failure, and would indicate on the part of the superintendent a sublime confidence in his own infallibility.

Better will it be for him and his teachers if he present a method as skillfully as he may be able, commend its merits and criticise its defects; or, better still, he can give a general outline as to what he wishes presented and how it should be presented, and then wisely leave the exact details to be worked out by his teachers. He should invite the freest and fullest discussion of the plan of the work, and be ready to adopt any good suggestions or modifications which may come from his teachers. The superintendent needs to exercise much good sense here, so as to discriminate between criticisms aimed at his plan and those aimed at himself. The personal element must not enter here.

Best of all, remembering that he has those three classes of teachers to deal with, the imitative, the irrational, and the thoughtful, he should invite one of his most successful teachers to present her plan of teaching a certain subject, or request her to instruct a class before the grade meeting. Wise choice is necessary here, so as to secure a teacher of judicial temper, who will not be easily disturbed by the sharp cross-fire to which she will likely be exposed when her work is thrown open to discussion. The superintendent must wisely direct and shape the course of the discussion, and from his knowledge gained through schoolroom visitation thoroughly vitalize it. This I regard one of the most helpful modes of conducting a grade meeting.

In the study of the best plan of teaching a subject, there are so many complex elements that enter into it, so many important results in the child's development that should come out of it, that I dare not as superintendent trust myself to simple theory. I dare not dogmatize where so much is at stake. When there comes a conflict between the results attained in the schoolroom and what judgment seems to indicate, I bow to the dictum of intelligent experience rather than to that of cold, logical theory. I am, therefore, fully convinced that that kind of teaching which has been thoroughly tested in the schoolroom, and has produced the best results there, is the teaching which should be presented as an object lesson in the grade meeting.

SOME SOCIOLOGICAL FACTORS IN RURAL EDUCATION IN THE UNITED STATES.

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Education is one of the most important social functions. It is society that, employing its various agents, uses the accumulated knowledge and thought in its possession to form the character and direct the lives of the new members that are constantly being admitted to its ranks. In this way education acts strongly upon the social functions; so strongly, indeed, upon some of them that it may be said to determine their character. Nor is this all. It is equally true that the other social functions act strongly upon this one, serving to determine both the quantity and the quality of the education that society furnishes its members. It is to the discussion of this second proposition, limited as it is in the programme, that this paper will be devoted. First, however, we may take a broader view of the subject, for the purpose of seeing more definitely what it embraces.

In the month of August, 1891, the Swiss celebrated two notable anniversaries. On the first day of the month the confederacy celebrated the sixth centennial, and on the fifteenth the city of Bern the seventh centennial of their respective foundations. Every man who gave any real thought to these two anniversaries must have remarked that the place of Switzerland in the history of the world, and in the present life of the world, is quite incommensurate with her territory, population and natural resources, and must have reflected upon the causes that have made it so. The Swiss area falls a little below 16,000 square miles, and the Swiss population a little below 3,000,000 souls. Together Massachusetts, Connecticut, and Rhode Island are somewhat less in size and somewhat more in population. Among the causes of the disparity to which attention has been directed, high place must be accorded to education. The federal constitution of Switzerland contains these provisions: "The cantons provide for primary instruction, which shall be sufficient, and thus be placed exclusively under the direction of the secular authorities. It is compulsory, and in the public schools, free. The public schools shall be such that they may be frequented by the adherents of all religious sects without any offense to their freedom of conscience or belief." The country ranks among the foremost in the world in respect to public education. The amount of money expended on schools of various kinds is relatively high, while illiteracy in large parts of the country has been practically anni-

hilated. In the year of the two centennials referred to, primary education cost on an average forty francs, and secondary education 151 francs, to the scholar. The average expenditure for primary schools was ten francs for each inhabitant. There were, however, marked differences in different parts of the republic. The best cantons compare favorably with the best states of North Germany. While the German and the French cantons, other things being equal, are on the same footing, the Italian cantons fall far into the rear. The contrast between the Protestant and Catholic cantons is marked. Not only do the Protestant cantons surpass the others as a rule, but the Catholic ones rise higher in the scale the more they have been touched by modern progressive influences. In the full Protestant cantons the school attendance is one to five of the whole population, in the half and half cantons one to seven, while in the Catholic cantons it is one to nine. Zürich makes an excellent showing; but Zürich has an educational history running back for centuries. It contains the largest of the Swiss cities; next to Geneva, it has the densest population, and it is also very wealthy. Protestant controversialists have been prompt to ascribe the superiority of the Protestant cantons in general solely to religion, but it is only fair to observe that, as a class, the Catholic cantons are the more mountainous, the more thinly populated, the poorer, and the more backward. Such cantons as Uri, Schwyz, and Unter-Walden-Nied expended but three francs for each inhabitant on education, while Zürich, Schaffhausen, and Basle expended fifteen, sixteen, and twenty-four francs, respectively. Uri, Schwyz, and Unter-Walden-Nied, which formed the original confederacy in 1291, all abut upon the great central lake; they are all small, infertile, thinly populated, containing no considerable towns, and are largely devoted to grazing and pasturage. Uri has the sparsest population of all the cantons, save alone the Grisons, which lies on the Italian side of the Alps. Now, in studying Swiss civilization these facts cannot be separated. They hold together. They give an excellent example of the interaction of social forces, or of the mutuality of cause and effect. Change any one of the factors, and you change more or less the whole circle to which it belongs. So much will suffice to illustrate what is meant by sociological factors in popular education.

The subject as defined on the programme offers to our minds many extremely interesting phases. It will be best, however, to confine our attention to such phases as have also practical importance, holding out some promise of reform or progress.

First, we will give attention to density of population. The importance of this element in the rural-school problem becomes obvious at a glance. In populous localities fewer schools and districts

relatively, are called for, while, at the same time, owing to the larger numbers and the more varied attainments of the pupils, the system can be more fully developed. The school and the home under the present system cannot be far apart; otherwise children will attend the school with difficulty, or not at all.

Once more, the interest and enthusiasm of pupils and teachers depend directly upon the number and the ability of the pupils present. For the majority of children individual instruction, or anything closely approaching it, is not to be commended. Aristotle condemned such instruction on political grounds. It is also to be condemned on pedagogical grounds. Children need the inspiration of numbers. Besides, there is a larger ethical element in numbers. As a rule, you can no more make a good school out of a half-dozen pupils than you can make a powerful galvanic battery with one or two pairs of plates. Then, again, the question of cost is directly involved. Where pupils are scattered and the schools are small education is necessarily very expensive, provided it is at the same time good. Generally, however, it is bad.

Some twenty years ago I investigated one of the oldest townships in Northern Ohio in respect to its school condition, and with these results: Number of schools, 7; youth of school age enumerated, 191; pupils enrolled in schools, 103; average daily attendance of pupils, 71; average size of schools (number of pupils), 10; largest enumeration in any district, 85; smallest, 12; largest enrollment, 37; smallest, 3; largest daily attendance, 25; smallest, 3; largest cost per pupil in any district, \$42.66; smallest, \$18.56. Argument is not needed to show that this was an inefficient and wasteful system of education. How much better it would have been if the seven schools could have consolidated, thus putting all the pupils under two or three teachers. I remember a school in Ohio within sight of my own home that was kept in session a whole summer with but two pupils in attendance, and these two were all there were in the district. My father, who was a man of close observation, was in the habit of remarking in my boyhood that a farm of 1000 acres situated all in one school district would, as a rule, spoil the school by reducing the number of children; and I have often seen confirmation of his statement.

The census office at Washington considers those parts of the country that have a population of less than two to the square mile unsettled. These parts amount to a little more than one-third of the whole, not including Alaska. In constructing its tables and maps to show density of population, the census office excludes the cities, or those centers of population containing 8,000 persons or more. In 1890, the second of the two rules excluded, 443 centers of population,

containing an aggregate of 18,235,670 inhabitants, or 29.12 per cent. of the whole. The whole country, less the parts excluded by the first rule, the census office has divided with reference to certain *maxima* and *minima* of population, as follows:

2 to 6 to a square mile.....	592,037 square miles
6 to 18 to a square mile.....	394,946 square miles
18 to 45 to a square mile.....	701,847 square miles
45 to 90 to a square mile.....	235,148 square miles
90 and above to a square mile.....	24,312 square miles
Total.....	1,947,287

The superintendent of the census makes some interesting remarks upon the economical signification of these statistics:

These limits define in a general way the extent and prevalence of various classes of industries. This group, two to six to a square mile, indicates a population mainly occupied with the grazing industry or a widely scattered farming population. The second group, six to eighteen, indicates a farming population with systematic cultivation of the soil, but this either in an early stage of settlement or upon more or less rugged soil. The third group, eighteen to forty-five to a square mile, almost invariably indicates a highly successful agriculture, while in some localities the beginnings of manufactures have raised into this group a difficult farming region. Speaking generally, agriculture in this country is not carried on with such care and refinement as yet to afford employment and support to a population in excess of forty-five to a square mile. Consequently, the last two groups, forty-five to ninety and ninety and above to a square mile, appear only as commerce and manufactures arise and personal and professional services are in demand.

He might have introduced education with equal propriety. The statistics given throw a direct light upon school material and an indirect one upon school resources. Much the same may be said of churches and the intellectual and moral instruments of society generally. There is, therefore, cause for deep regret that such large areas of our country are falling off in population. From 1880 to 1890 more than 400 counties, or about five times as many as there are in the state of Ohio, suffered in this way.

But, secondly, the character of the population must be considered as well as its numbers. It is evident that a certain homogeneity is very conducive to public education. The children of such a community can be educated together, and hence more cheaply and more effectively. One system of schools suffices for all classes. But if the children must be collected in different schools according to non-educational tests one of two things will certainly happen; either public education will become expensive, or it will become inferior in quality. Looking at the subject from this point of view merely, it is unfortunate that, in such large portions of the United States, popular educa-

tion should be so embarrassed by the race question. In 1890 the per cents of white and colored population, respectively, were distributed in the five great divisions of states that the census office recognizes in the following manner:

	White, Per cent.	Colored, Per cent.
North Atlantic States.....	98.4	1.6
South Atlantic States.....	63.2	36.8
North Central States.....	98.0	2.0
South Central States.....	68.3	31.7
Western States.....	94.8	5.2

If per cents for the states severally were given the contrasts would be still more striking. The per cent. of colored people in New Hampshire, for example, was .18, while in South Carolina it was 59.87. Now, there is little probability that the educational value of such statistics as these will be exaggerated. The presence of a large colored population in any community tends to affect popular education unfavorably in three ways. It increases its cost, makes its quality inferior, and lowers both the intellectual and moral level of society and its money-earning capacity. In one respect, however, the rural parts of the country are better off upon the whole, than the cities. Religious differences do not disturb popular education to the same extent. Relatively, parochial schools are fewer in number.

In the third place, the wealth of society is a very important factor in education, and particularly in rural education. Naturally the *per capita* wealth of the several divisions of states varies greatly. In 1890 these were the averages:

North Atlantic States.....	\$1,132 per capita
South Atlantic States.....	519 per capita
North Central States.....	1,129 per capita
South Central States.....	583 per capita
Western States.....	2,250 per capita

In the North Atlantic states the maximum was in Rhode Island, \$1,459 *per capita*; the minimum in Maine, \$740. In the South Atlantic states the maximum was in Maryland (excluding the federal district), \$1,043 *per capita*; the minimum in South Carolina, \$348.

Now it is perfectly well understood that a modern system of state education can be supported only at great public cost. Still more, the cost is all the time increasing. Our total expenditures for this purpose the last twenty years have been mounting upward by leaps and bounds. At present the money expended by the states together is \$175,000,000 annually, which is more than twice the cost of supporting the national government before the Civil War. Education has come

to be a great item in the budget of every highly civilized country in the world.

Fourthly, the character of the population in respect to its money-earning power must be taken into account. The size of the average family and the relative number of taxpayers, or adult males, and their productiveness as economical agents, all become educational factors of much importance. If families are large, the number of children to be schooled is proportionately great; which under some conditions would add to the efficiency of the schools, and under other conditions would increase their cost. Then the larger the relative number of adult males, and the greater their producing power, the higher their intelligence and educational needs, and the greater their ability to provide the sinews for educational warfare. We need not enter upon the correlation of the size of the family and its material condition. It still remains true today, however, as in the day of Solomon, that the destruction of the poor is their poverty. In respect to educational possibilities, there is the greatest difference between a community having a high ratio of adult male population of large wealth-producing power, and a community having a small ratio of such population with small wealth-producing power. The country taken together in 1890-91 showed surprising variations in this respect. There were 91.4 taxpayers for each 100 children six to eighteen years of age; but in different sections the ratio varied from 65.9 to 100 in the South Central states to 156.7 to 100 in the Western states. In South Carolina there were fifty-five adult males, thirty-two of whom were colored men, to earn the money with which to school 100 children. Comparing the taxpayer factor with the *per capita* tax for education, some very striking results are obtained. Dr. Harris has shown* that in Montana a contribution of \$5.85 per taxpayer furnished in 1890-91 \$16.02 for each child of school age, while in Texas a contribution of \$6.55 per taxpayer produced a result of only \$4.48 for each child. Mississippi, after raising per taxpayer about half of what Nevada raised, had only about one-eighth as much as the latter state for each child of school age. The causes that affect the ratio of school children to the adult population are beside the present inquiry. But it is perfectly obvious that this is an educational factor of much value.

Little logical acumen would be required to see either the educational value or the social congruence of such factors as (1) the wealth *per capita* of the country or any state in it, (2) the expenditure *per capita* for public education, (3) the expenditure for the same purpose per pupil in the schools, and (4) the per cent. of illiteracy, taking the

*Report by the Commissioner of Education, 1890-91, page 24.

population 10 years old and more into the account. These items are shown in the following table:

	1	2	3	4
North Atlantic States.....	\$1,132	\$2.76	\$23.65	6.2
South Atlantic States.....	579	.96	8.25	40.3
North Central States	1,129	2.81	19.96	6.7
South Central States	583	.98	7.59	39.5
Western States.....	2,250	3.55	34.03	11.3

It must be remembered, however, that these statistics are now several years old.

Perhaps I should observe that statistics may be taken too seriously. We need not now examine the arguments by which Mr. Buckle and others like him have sought to show that man has no free agency, but that society is governed in all its movements by laws as fixed as those of material nature. It answers the present purpose to say that the highest state of education is not always found in the most populous, the richest, or the most homogeneous states. France is much richer than Germany, but she is inferior in education. England is far richer than Scotland, and has been behind her in popular education since the time of John Knox. Rhode Island is the richest and most populous, relatively, of the North Atlantic states, but she has never led the American common school column. There are other factors than those that are distinctly sociological which enter into the problem. Educational traditions and ideals, public spirit, and force of character, all tell. At the same time it would be the sheerest folly to follow this line of argument to the extent of excluding or belittling the material factors that enter into public education and all similar social interests.

The line of thought followed in this paper is sustained by the Michigan statistics of illiteracy, collected by the state census office in 1894. Three groups of statistics drawn from the published bulletin will be given.

I. Ratio of the total population of the state 10 years of age and more, unable to read and write, 30 in one 1000.

Ratio of the native-born population in the state 10 years of age and more, unable to read and write, 21 in 1000.

Ratio of the foreign-born population in the state 10 years of age and more, unable to read and write, 84 in 1000.

These ratios cause no surprise and call for no particular comment.

II. The ratio of foreign-born persons 10 years of age and over in the state who are unable to read or write, and the number of such persons in the cities of the state were practically the same, viz., 84 in 1000. Nor does this result create surprise.

III. Ratio of native-born population of the state 10 years old or more, unable to read or write, 21 in 1000.

Ratio of the native-born population of the cities of the state 10 years old or more, unable to read or write, 14 in 1000.

On this basis the showing against the state as a whole compared with the cities taken together is 50 per cent. But if we set the cities against the remainder of the state, or the rural districts, the showing is more favorable for the one and much more unfavorable for the other.

Ratio of the native-born population of the country districts 10 years old or more unable to read or write, 24 in 1,000.

Ratio of the native-born population of the cities 10 years of age or more, unable to read or write, 14 in 1,000.

The ratio in the country districts is 70 per cent. greater than in the cities. If the country rate of illiteracy could be reduced to the city rate—or, what is the same thing, if the country level of intelligence, as measured by this test, could be brought up to the city level—the number of native-born illiterates of the given age would be reduced about 8,000.

These last rates are certainly not in accordance with prevailing opinion. How far they are supported by the statistics of other states I am unable to say; but there can be no doubt that, as measured by the reading-and-writing test, the rural districts of Michigan are quite behind the cities. It may, perhaps, be said that Michigan is comparatively a new state; that much of it is thinly settled; that it contains large lumbering and mining districts, and that these facts explain the greater illiteracy of the country district. Fortunately, we are able to follow the inquiry into the counties, and ascertain the exact situation. The fact is that in the oldest and wealthiest parts of Michigan the cities as a rule surpass the counties as wholes in respect to popular intelligence. The city of Detroit ranks distinctly higher than Wayne county, in which it is situated, and the same may be said of the cities of Grand Rapids and Ann Arbor as compared with Kent and Washtenaw counties. No doubt several facts enter into the explanation of this state of things, but the most important of them is the inferiority of the schools.

My attention was first called to the subject of rural schools and education about twenty-five years ago. A series of charts showing the more important educational statistics of Ohio, prepared by Dr. T. C. Mendenhall, was exhibited at Philadelphia in 1876; and I was particularly impressed by the chart showing the size of the schools in different parts of the state. Then in the Western Reserve, where social conditions affecting schools began to change as early as 1850,

I had right around me a most impressive object lesson. I publicly urged the consolidation of schools as a means necessary to meet the new conditions. I shall venture to quote a few sentences from an address that I delivered and published in 1878:

Centralization is the only remedy for this state of things. There must be fewer school officers, fewer schools, fewer teachers, and more pupils in the school. You cannot have a fire without fuel or school without scholars. The Western Reserve Yankee is very conservative. Having always had a school-house on the corner of his own farm or of his neighbor's farm, he cannot reconcile himself to the idea of sending his children to school three or four miles away. But in many places it must come to that in time; in such towns [as those mentioned] the children will be taught in consolidated schools or not at all. People will not long be so absurd as to keep up a district school for three scholars. When they make up their minds to the inevitable, which is in this case also the desirable, they will find that the necessary steps are both few and short. It will be found both cheaper and better to carry the children to the distant school than to go on in the old way.

I now hear, with much satisfaction, that the Western Reserve is beginning to move in this direction. The necessary legislation has been procured in several cases, and the schools of several townships have been more or less consolidated. Old buildings are abandoned, if necessary, and new ones built. The schools and teachers are much reduced in numbers and greatly improved in quality. A competent correspondent on the ground writes me as follows: "We carry the children to and from the school when necessary in closed hacks hired at public expense. We get the inspiration that comes from large numbers; we can classify according to the advancement of the pupils; we are able to have a much better grade of teachers without any increase of taxes; we secure a more uniform attendance, and the children are never tardy; the instruction is at once better and cheaper." He adds that those people who are always opposed to new methods meeting changed conditions are opposed to the movement, but the opinion is spreading that the country district school does not measure up to the educational demands of the time.

This is progress. There is little more reason for having eight or ten district schools in a sparsely populated Ohio or Michigan township than there is for having an equal number of churches.

DISCUSSION.

SUPERINTENDENT LAWTON B. EVANS, Augusta, Ga.—It is in the nature of people to collect in communities. Man is the most gregarious of animals. His social instincts and capacities impel him to build cities and enjoy living in them. This explains the ambition of the American youth to live in a big town.

Our American idea has been to make our cities so great, so beautiful, so attractive, and so full of opportunity that everybody will desert the fields and farms and move right in.

The educational thought of our age has been directed toward the improvement of city school systems. So we hear of the great schools at Boston, Chicago, New York, Cincinnati, Philadelphia, and a score of other places, but I am yet to hear of a single county or township of rural population the excellence of whose schools entitled them to national repute. The emphasis of our thought has been placed long and devotedly on city schools at the expense of the rural schools.

It is true that cities are the centers of highest civilization. Our human nature has made them so. Architecture, art, literature, schools, fashion reach their highest forms when people strive with each other for display. The very contact of people civilizes them.

Cities are also the centers of greatest iniquity. The worthless, the idle, the contentious, the wicked gravitate toward large centers. Extremes of virtue and vice meet. The force of cities is centripetal, and attracts everything good and bad alike.

But cities do not develop individuality. There is a leveling influence about them that merges individuals into masses, and it is only occasionally that a volcanic genius will break through the hard crust and rise up out of the burning level of great city life. The highest types of individuality—the strong and independent men of our nation—have been born and bred in village or rural homes, away from the turmoil of city life, in quiet and serious communion with Nature in her grand and ennobling forms.

Now the largest and most important part of our population lives outside of cities. It is the people of the villages and farms who produce the food, and raise the cotton, and fell the timber that form the basis of our commerce and manufactures. The rural population must always be the bone and sinew of any country.

We need skilled labor in the fields as well as in the city. We need intelligent and scientific management of a farm as well as of a great factory. We need business methods here as well as in the great commercial houses of the city. We need economy of effort, and conservation of force, and adaptation of invention and discovery here if we need it anywhere. And we need culture and refinement among the country people. Music, painting, books and all the evidences of a higher kind of life are as proper on the farms as in the cities. The more highly educated the people of the rural districts are, the more capable they will be of taking advantage of the improvements in machinery, of economizing time and labor in producing raw material, and the more time they will have to devote to culture and the higher arts of civilization. They will reach the same results as now in less time, and will live more comfortably and more happily.

That farm life is behind city life in development is due in some part to the isolation of the rural population. Men live too far apart and see each other too

seldom to exert a refining influence over each other. In other part it is due to the attention that has been given to educating the people of the city.

It is quite time that we change the emphasis of our study, and turn aside from the contemplation of the excellencies of our city schools and consider the necessities of our rural schools.

The wisest policy is to frame some educational scheme that will keep the people in the country; that will stop the exodus from the farms; that will make the rural population content; that will make them enlightened and prosperous.

I believe very firmly that *the county or township is the proper unit of educational organization*. If one system of schools can be made to extend over a whole county, including the city and villages, the organization will be upon the basis of territory. By this means the entire country can, after a while, be brought under uniform organization. So long as the organization is by cities, we merely organize by locality, which can never be uniform nor entire. It will always remain a one-sided development.

A proper policy is to induce the people hereafter to organize by area rather than by spots. The effect of this will be to give to the rural child the same school advantages as to the city child, and there is every reason in equity and good sense why these advantages should be the same.

I come from an illustration of this kind of organization, and it may not be amiss to let you know something of the schools of Richmond County, Georgia, in which county is situated the thriving city of Augusta. Here, for the past twenty-five years, has been in operation what is known as the county system.

One board of education, composed of representatives elected by the people for a term of three years, one-third of the membership expiring every year, has charge of the entire school interests of the city of Augusta and of the county of Richmond. This board of education has the unique power of levying a school tax directly upon the people of the county, without revision by any other authority and without any limit as to rate or amount. The school tax is levied and collected at a uniform rate upon all property of the county, whether it is in the city or out of it. This forms the general school fund of the county.

When it comes to the distribution of this fund, no regard is paid to the amount raised by any ward of the city or any district of the county, but the fund is distributed according to the necessities of each ward and district, determined by the number of children to be educated. The school fund of the whole county is raised by a tax on all the property of the county, and is distributed upon the basis of the school population of each community. Thus it happens that a community rich in naught else but children will get a flourishing school, paid for by their wealthy but less fortunate neighbors.

As a matter of fact, a large part of the money paid by the city is annually spent in the rural districts, for the city has nine-tenths of the taxable property but only three-fourths of the school population. So it happens that the rural schools may pay one-tenth of the school tax and receive the benefit of one-fourth of it. Augusta has spent in the past twenty years the sum of \$200,000 in building schoolhouses and paying school teachers for the children who live in the country districts around her. Augusta has shown her faith in the proposition, that every city needs to be environed by an intelligent, industrious, and contented rural population.

When it comes to teachers, the same qualifications are demanded for rural schools as for city schools. Upon the regular examination terms, and upon the issuing of licenses to teach, an applicant does not know whether he will teach in the city or out of it and to many it is a matter of indifference. And I know

whereof I speak when I say that there are young women graduates of normal colleges doing high-grade work in country schools ten miles beyond the limits of the city, and doing it happily and cheerfully. We believe firmly in the further proposition that a country school is entitled to as good a teacher as a city school, and that those who live in the fields are as deserving of education as those who dwell beside the asphalt. Carlisle must have had a country child in his mind when he said, "This I consider a great tragedy, that one soul should remain in ignorance that has capacity for higher things."

The teachers are treated as nearly alike as can be. City and country teachers are paid about the same salaries. They get it at the end of every month and on the same day. The certainty and the regularity of a fixed compensation creates a sense of security, safety and comfort in a teacher, and accordingly increases his efficiency. No teacher can do his best work where he works at starvation rates, is paid once every three or four months, and often in scrip that he must discount. There is much philosophy and also economy in the maxim that advises us to pay a public servant well and watch him closely. So we make no distinction of locality. First-class work is worth as much twenty miles from town as it is in the heart of the city.

So far as length of term is concerned, the schools all run nine calendar months. They all begin at the same time and close at the same time. During the last year every child in the county, regardless of where he lived, was offered nine months of actual tuition.

So far as schoolhouses are concerned, these are located in rural districts so as to be on an average of four miles apart. No child is out of walking distance of a school running nine months in the year, and taught by a good teacher. These houses are owned by the board of education, and cost from \$300 to \$2500 each, according to size and equipment.

One superintendent has charge of all the teachers in the county. The same degree of efficiency that should attend the supervision of city schools is likewise extended to the country schools. One expert for all is the theory, and so far as human effort can avail is carried out in practice. The same course of study is prescribed for the pupils, and the same course of professional reading is required of the teachers. The teachers of the city schools meet for instruction once a week. The teachers of the country meet once a month, and in addition have a one week's institute in the summer months.

This, in brief, is the outline of the plan of organization of the schools of which I assumed charge thirteen years ago. That it has its defects of management and its grave faults I am prepare to admit. These I need not enumerate at this time. Suffice it is to say that no one knows what they are, and that they are, more surely than I do. What institution devised and controlled by an imperfect humanity is without the faults that are incident to us as men? That our system is projected upon the proper theory, for all our population, and for all the boys and girls under our tuition, I firmly believe.

There are two other systems in Georgia organized upon a similar plan, one for Savannah and the county of Chatham, and the other for Macon and the county of Bibb. Because it is rather unique and interesting, and presents some phases of the rural problem worthy of your consideration, is my sufficient excuse for presenting it to your attention.

W. W. PENDERGAST, Superintendent of Public Instruction of Minnesota.—
"What can be done for the improvement of our rural schools?" is constantly asked and never satisfactorily answered. The fact that they are in a condition which needs help, that they are far below the city schools in good management,

has never been seriously questioned. And yet there is much to be said by way of qualification, for during this half century these same rural schools have continued to furnish the best brain and muscle of the country. Whenever the teaching force in the cities gets below par an infusion of fresh blood from the country is depended upon to bring it up to its normal level. The best business men in all the great marts of trade, the clerks in the wholesale and retail stores who are the most reliable or who give the best satisfaction, almost invariably come from these schools. Patriotism is here so instilled into the minds of the boys that it finds a permanent abiding place. Yet the yearly terms of these country schools are little more than half as long as those in the city, while the disparity in the rate of taxation is so enormous as to be absolutely appalling. In our own state, for instance, the great cities build the best schoolhouses in the world, secure the highest-priced teachers, furnish the most approved equipments for a special tax of about two to four mills on the dollar, while in the outlying districts a special tax of twelve to twenty-five mills is by no means uncommon. Still the best scholars in our high and normal schools today are those who come from these high-taxed, struggling districts. Principals and superintendents of the best graded schools in the state say that it is of the greatest advantage to have these boys and girls for examples of studiousness and good scholarship. Though in the country the yearly terms are short, the pupils attend for a purpose, and make the most of the limited time allotted them.

The welfare of the school, the advancement of the scholars, the words of commendation from their teachers, their own consciousness of mental growth, all stimulate them to further and higher efforts. During the vacations the coming school term and its work are discussed, so that when a scholar enters school he knows what to do and sets about it with a will, knowing that "a work well begun is half done." In the country each pupil is intimately acquainted with all the others, and not only with the pupils themselves but with the parents. All the families enjoy this close intimacy, and there is a generous and healthful emulation continually pushing them forward to nobler efforts and inspiring greater zeal. The mixing up of all grades in one room is not altogether without its compensations. It is of great advantage to the younger pupils to hear the older ones recite, and many a young pupil has felt an incentive to be something higher and better as he sees what the best scholars in the school have done before him.

Farmers' children have other work to do outside the schools. This needs brain power and good judgment. Their fathers and mothers cannot always be with them; a great deal is left, not only for them to do, but to determine how to do. At first many mistakes will be made. They will notice these mistakes themselves, or, if they do not, their attention will be sharply called to them, and their next plan must be one that will avoid such disasters. So, when out of school, they are constantly strengthening judgment, which is the supreme end of all education. If "nature is the basis," then the children in the rural districts have a wonderful advantage. The fact that they are in a position to do more work in a given time is, however, no reason why the term should be shortened. Rather should those schools be favored which show the best percentage of returns.

In what has been said, I do not mean it to be understood that the country schools are doing better work than they would if they had greater advantages; for instance, if they had more months of school in the year, if they had better teachers, better schoolhouses, better equipments. I have been trying to show that there are some things in their favor of which they are not slow to take advantage. The great difficulty in their way is the burden which the school

imposes compared with that which their neighbors in the city are compelled to carry. The difference between a rate of four mills and fourteen mills is altogether too wide, and, as these boys and girls are all the children of the state, the state should do more than it does now in the matter of their education.

Till within a few years Minnesota simply compelled the districts to educate their own children. But this was very unfair, for the reason that in one part of the state the cost is, as we have seen, many times as great as in another portion, while the children of that particular locality are not expected to and as a matter of fact do not always, or even generally, spend their after lives in the little three-mile square district where they have received their early education. The best of them are called for in all directions. We see streams of them from every county flowing toward the city, but we look in vain for any reflux tide. It is fair, then, that the state itself should carry a large portion of the burden of educating these children. The country schools need less pity and more justice and fair treatment. The general government should appropriate about one dollar for every pupil who attends school three months in any public-school district in the United States; each state should raise two mills to be appropriated in the current school fund; each county should also raise two mills, and each school district should sustain an eight-months' school, providing it could be done without making the district rate, including the state and county school taxes, over eight or ten mills, which should be the limit. But if any rate less than this would not give them the full term of school, each district should levy that amount, and hold a school as long as the funds so raised would allow. Should this yield more than required for current expenses the surplus could be used for buildings.

There must be some plan for more thorough and more frequent supervision. This can best be brought about by a provision that a part of the appropriation made by the general government be devoted to this purpose. Localities cannot be depended on to levy taxes for what seems to them a comparatively useless expenditure, but they would gladly welcome it if given by the government.

It would be of the greatest benefit to have the teachers selected by those who are thoroughly acquainted with them, their qualifications, and their peculiarities, and whose judgment would decide where each one should be located.

To sum up, then, the great need of the country schools is ample means for carrying on those schools properly. The results already attained under present financial straits are but an earnest of what might confidently be expected with those embarrassments removed. A larger fund could be used most beneficially to secure a more extended supervision, more intelligent selection of teachers, more useful apparatus, more school libraries, better equipments of all kinds, and longer school years.

All this can be successfully brought about by the co-operation of state and national governments.

SUPERINTENDENT A. K. WHITCOMB, Lowell, Mass.—The state of Massachusetts has done much for its rural schools through its half dozen agents of the board of education, who spend their whole time visiting schools, holding institutes, counseling with teachers and school committees, etc., and by the judicious distribution of the income of a state fund which now amounts to several million dollars. I have, however, only time to speak briefly of one measure which is, so far as I know, peculiar to the Bay State, and which seems to me to be of great importance. I refer to the state's system of district superintendence. By a law passed in 1888 any two or more towns (the latter being with us what would, I think, be called townships in most states), the valuation of

each of which does not exceed \$2,500,000, with an aggregate of not more than fifty nor less than twenty-five school in all, may unite in the employment of a superintendent toward whose salary the state will contribute \$750. It is provided that the district shall pay at least as much more, so that the superintendent's salary cannot be less than \$1500, and may be as much more as the towns choose to pay. As a further inducement to towns to unite in such districts the state appropriates an additional sum of \$500 to be used in paying for better teachers and longer terms. This offer has proved so attractive that all except a few of the smaller towns have accepted it, thus bringing more than 91 per cent of the children of the state under the direct care of a superintendent who gives his whole time to the work. The salary is such as to pay for ability and professional training. From personal knowledge I can testify that these superintendents are among the brightest and most energetic schoolmen of the state, and their zeal has already largely revolutionized the teaching in the rural schools. The increased demand for normal schools which is to give us five new ones in the immediate future is largely due to their appreciation of the value of professional training for their teachers. Under their persuasive influence upon committeemen wages have been increased, better teachers are obtained, and their tenure of office has been lengthened; new methods have been introduced and courses of study have been improved; teachers' institutes, meetings, and reading circles have been multiplied; schoolhouses and school books have received more attention, the per cent of attendance has been considerably increased; and, in short, their influence, exerted in more ways than I have time to mention, has already effected a marked improvement in the rural schools of the state, and is bound, I think, to do still more for them in the near future. I commend this Massachusetts system, therefore, to the favorable consideration of all who are interested in the welfare of the rural schools.

SUPERINTENDENT H. SABIN, Des Moines, Iowa.—The great trouble in connection with rural schools all over the land to-day is the low state of public opinion. Our efforts will be futile until we contrive some way to stir people up to the magnitude of this question. Every child in the land is entitled to the best school privileges possible under the circumstances, without regard to race, creed, sex or color. We need in every state men like Horace Mann to go among the common people and preach the gospel of education. Nothing deterred him from his work; nothing turned him aside from his mission. As, for instance, when he went to Pittsfield, and found no hall ready,—no preparations for his meeting,—he called upon Governor Briggs, and together they found rooms, swept the hall, arranged the seats and made fires, and when it was time for the address to begin a respectable audience found comfortable surroundings. This was a fair specimen of the zeal and determination which characterized his work.

SUPERINTENDENT EUGENE BOUTON, Pittsfield, Mass.—Superintendent Sabin has made mention of Pittsfield, Mass., in the days when its famous Governor Briggs had occasion to assist Horace Mann in sweeping one of its schoolrooms for a teachers' meeting. You will, I trust, permit me, as the representative of that beautiful and cultured city, to say that it has, during the past year, shown its appreciation of education by authorizing the expenditure of nearly \$300,000 for the erection of new schoolhouses. One of these is to bear the name of the high-souled governor who did not hesitate to forward the cause of public education by the lowliest service, when the advancement of that cause demanded such help at his hands. While tendering the regrets of my city that its janitor did not in those

old days show more consideration for the eminent educator who honored it by his presence, permit it to congratulate itself that the neglect was remedied by its most distinguished citizen, one of the noblest and most honored chief magistrates that the commonwealth of Massachusetts ever had, and that the seed then sown has produced so abundantly.

The subject under discussion seems to resolve itself into two divisions, taxation and supervision. In reference to taxation, I think that the area contributing to the support of the schools should be large enough to secure reasonable equality of burdens and a fairly equal distribution of means for the support of the schools. Whatever plan will best secure these ends would seem to be the best one to follow. It is not necessarily the county system. One county may contain a large city and abundant wealth, like the county of Richmond in Georgia, and next to it may be a county as far inferior to it in taxable property as the ordinary rural township is poorer than the average city. It is not evident, therefore, that the support of schools by the county system will, of necessity, secure more uniformity of burdens and means than taxation under the township system. In either case there is likely to be a nearer approach to equality of burdens and means if the entire state constitutes a supplementary area of taxation and if the weaker schools of the state are aided by the funds thus derived.

In reference to supervision, it is evident that the best results will not be secured if the area is too large to be properly covered by the supervisor. The average county is too large for close supervision by one person. He may be able to give proper attention to the schools of two or three townships or a city of moderate size. But the average county is certainly a much larger area than one person can supervise closely enough to secure the best results.

SUPERINTENDENT JOHN D. WORTHINGTON, Public Schools of Harford County, Maryland.—It seems to me there is no feature of the valuable paper read by Dr. Hinsdale so worthy of consideration as the emphasis he lays upon the need of larger and fewer rural schools.

This is a problem not met with in maintaining city schools, but there are various ill-digested reasons which prompt the ordinary country patron to desire a school at the end of his lane. Such schools are ruinously expensive for even the lowest grade of service. I recall in my own county a school, made necessary by the topography of the surrounding country, which enrolls twelve or fourteen pupils, and costs per capita 50 per cent. more for the very cheapest service than the town school some two miles distant, although the latter enrolls 450 pupils, and commands an able corps of teachers.

Much money is saved if the school authorities are empowered to pay for the transportation of such pupils to the adjoining school, while the advantages of being under a strong teacher, having the benefits of competition in class and the ennobling influence of a wider range of fellow students outside, are beyond measure.

The country school bears a very different relation to the people it reaches from the city school. It is second only to the church frequently found by its side. It is the center of all the best influences which help to uplift its people. Hence its opportunities for good will increase in the same ratio as its ability increases to command a strong teacher and a complete equipment, build up its circulating library, and draw to it as a common center the best people of its section.

The proper section to tax in order to furnish necessary means to support country schools is of the first importance. Many a school district is too poor to

support its school alone; it must have outside aid or the school will be a feeble one with a short school year.

The first unit of taxation should be the state. Since the state establishes a system of free education because she cannot afford to have her control in the hands of illiterates, it is no hardship that all her citizens should contribute the minimum amount of tax, to be distributed throughout the whole state in proportion to the school-going population. And to the extent that she commits herself in a general way to the task of furnishing free education, she should exercise a general but not a scrutinizing supervision over the grade of teachers to be employed, the course of study, and local management. The territory is too large and the people too varied in birth, occupation, wealth, and environment for her to go farther than this.

But just as the state is too large a working unit, so the borough or township is too small to yield the best results, and poor sections will inevitably find themselves unequal to the struggle. On the other hand, the county generally contains a unified people, and is not so large in area that it cannot be personally managed by one school board and overlooked by one active superintendent.

He is the proper official to supplement the work of the state normal schools in furnishing teachers, and if his certificates are graded according to scholarship shown at the examination, and classified according to professional skill shown in the schoolroom (salaries to depend upon both of these) the best method will be pursued to secure good teachers.

One error, it seems to me, is made in the system outlined by Superintendent Evans. The expense of living in large towns and cities is so much above that of purely rural districts that salaries there should be sufficiently raised that a city teacher's net income might equal a rural teacher's. Otherwise the system is the same as that which prevails throughout the state of Maryland, and I believe it is the true way to meet the rural-school problem. From it may be expected absolute uniformity and a fair degree of unity.

DR. HINSDALE (in closing discussion): I regret that the discussion has taken in part the trend that it has taken. What has been said about the comparative merits of the Maryland and the Pennsylvania systems is all interesting, but it does not touch the heart of the question. It is idle to suppose that the state school systems can be made uniform. A state school system to be efficient and useful must rest directly upon the political organization of the state. The people of a state will, and in fact must, use the same organs for carrying on their schools that they use for other public purposes. The New England states make large use of the town and small use of the county for all such purposes. Virginia and the southern states generally make large use of the county and no use of the town whatever. In the New England sense there are no towns in the South; or townships, as we say in the West. The old Middle States and most of the Western States lay less emphasis upon the town or township and more upon the county than the New England States. They lay less stress upon the county than the South. These three methods of local government are known to writers on institutional subjects as the town, the county and the mixed systems. Now, it is idle to think that these facts can be set aside in dealing with public education. The states will in general make their educational systems on the administrative side correspond to their systems of administration as a whole. Hence there will continue to be, as there now are, three groups of school systems, corresponding to the three systems of local government. This point of view it is important to grasp; for if the reforms of rural education must be postponed until the states can be made to

agree in these respects, then it will be postponed indefinitely. Touching for a moment the more practical side of the subject, I will say that, to my mind, the most important practical questions to be considered in connection with improving the rural schools are two in number. First, to throw the burden of public education much more heavily than heretofore upon the states, considered as units, and less upon localities. It may not be necessary in some states, but in the majority of states it is a crying necessity. The second question is to effect a reasonable consolidation of country schools, as was insisted upon in the paper read at the opening of the discussion this afternoon.

THE UNIVERSITY AND THE STATE IN THE SOUTH.

BY EDWIN A. ALDERMAN, ~~UNIVERSITY OF NORTH CAROLINA~~

(The southern half of this Union has for a quarter of a century been the battle ground of a great social conflict between the forces of an ancient, unique, and forceful civilization, bred into the bone of the people, and the new and strenuous influences of modernism and innovation. This revolution has been comparatively free from violence and haste. Thoughtful men at a distance and thoughtful men on the scene of action have failed to recognize the deeper meaning of the transition at play about them. They have, indeed, beheld some new and strange things, such as old leaders losing their followers and new leaders rising among the people; and they have heard a very babel of voices, some frantic, some callow, some sordid, and a few nobly and truly wise.

Something out of the ordinary was needed to embody in a graphic and impressive way the permanent elements in this large movement.

Those of us who were fortunate enough to stand in the plaza at Atlanta this fall, and to behold that noble display ranged about the Piedmont hills—the work of former master and former slave—felt that we were in the presence of a mighty herald crying to the world the triumphant culmination of the labor of a ruined and conquered people, and proclaiming to all men that the long slumbering land, freed from hindering tradition and the paralysis of war, had enrolled itself at a bound among the great industrial democracies of the world.

(The direction and elevation of this social new birth is the surpassing duty and function of all educational forces, and more especially of the higher education in southern life.)

Whether there shall issue from the conflict an enlightened civilization, blending the lovableness and charm of the old with the vigor and freedom of the new, or some unhappy system made up of crudities and ancient prejudices, is the task set for this generation of southern educated manhood.

(Isolated, individual, conservative, the South of the past held itself proudly aloof from the ferments of modern society, went its own way, and created its own dominant dramatic order. This order was a system of contrasts and lights and shadows. It produced neither wealth nor letters.) It dishonored labor, arrested immigration, minimized invention, unified industry, and exalted caste.) (The academies and private schools of the time, conducted by scholarly and devoted men, were numerous and effective — indeed, almost perfect — instruments for the purposes of the time; but the common schools, branded with the burning badge of pauperism, could not thrive. Yet there issued from this order the smallest, the alertest, the most powerful political force in Christendom.) The American Union had sprung from their brains, had been maintained by the valor of their arms, and had extended its territory under their guiding hands. By a strange historic paradox the causes of their weakness became as well the causes of their strength. The dangers and antagonisms of a militant labor system made them masterful in action and persuasive in speech. Baronial life, with its leisure and inherited overlordship, made them as simple as shepherds and as proud as kings. In the placid air of their enlightened mediævalism lingered the brave old ideals of courage, and beauty, and gracious dignity. There was but one overshadowing southern question then, and this for its treatment did not so much need universal thrift and the spirit of gain and growth as it did character, principle, oneness of purpose, and chivalric codes of conduct. Hence all the forces of the time concentrated on these lines, and there arose an assertive, sensitive, dauntless race of men, esteeming life less than honor and loyalty more than gold; who wrought with a sad, titanic sincerity for their doomed cause, withholding nothing, compromising nothing, until the mighty struggle wore to its sublime and pathetic close at Appomattox.

The great war, in the mystery of historic forces, freed the white man, rolled away his burden, and enrolled the South in competition with the great industrial democracies of the world. Its problems, no longer direct and primitive, are their problems, intensified by the painful processes of social transformation. (The old individualism has given place to combination and capitalism, servile labor to free labor, and with this the best products are to be raised, the best goods manufactured, and the best routes to market devised. Our first work is to possess the land and subdue it.) The law of the passage of society from the patriarchal to the economic stage necessitates the higher organism, the subtler brain, the more cunning hand. Hence, like a belated army, the south is seeking to conquer a place in material civilization; its dreamers become captains of industry and its doctrin-

aires lords of trade. Under this new goad to effort we are becoming builders of cities, producers of wealth; and both the dangers and opportunities that await us are the dangers and opportunities of an industrial state.

In the wake of this emancipation from the old subtle social creed that suppressed individual effort, there are other wider issues. Perhaps the very widest is the wise and just guidance of the irrepressible instinct of democracy, restrained for generations, now asserting itself in the upheaval of the plain people—the third estate—who are everywhere coming to the front, demanding their share in government and challenging the authority of the ruling class. Our untrained men are learning to govern by governing pedagogically and historically; a wise process, for that surely is better than to be governed and remain ignorant. The situation is not without great hopefulness. The rank and file of this popular uprising are the best material in the world for the making of educated citizenship. The Civil War revealed their value to the world and constituted their university. Its marches and dangers opened their eyes and gave them their outlook on life. They and their sons, the younger element in the movement, are men of unmixed English and Scotch-Irish blood; inheritors of the Anglo-Saxon consciousness; descendants of men who sacrificed peace and life for principle in three wars; keen-witted if untrained; their very excesses the result of boundless faith in the majesty of their government. The tasks awaiting adjustment by these men, sure to attain and hold power in the end, are enough to appall the wisest statesmen and profoundest social scientists—the remodeling of constitutions, the settlement of grave questions of suffrage and property, the reconciliation of classes, and, greatest of all, the problem of the two races.

The sentimentalists and partisans of the reconstruction period fancied that they had settled the question which had disturbed the dreams of Jefferson, which had perplexed and affrighted the national conscience through all its history, and which had just evoked the mightiest moral energies of the century. But their solution was no solution. It was solemn *opéra bouffe*. The problem had just begun and remains the transcendent sociological problem of the age. Rant will not dispose of it, nor ignorant gush, nor race prejudice, nor the philosophy of the sentimental and the remote; but it must work itself out on southern soil by the wisdom of southern men of both races. It must pass into the region of scientific study and investigation. The southern scholar must make it his province in the still air of the university; the statesman and publicist must ponder it, and the capitalist may well reckon with it amid his gold.

What manner of men, then, does the South need in its coming life?

Perhaps in the past we set too much store by wise leaders and neglected to provide for wise followers. If so, the irony of fate is sporting with us, for now in the threatening danger of these great questions we are practically leaderless. The old type of leader, softened by fortitude and idealized by woe, has passed away, canonized by love and letters. The voluntary and occult forces of the times are seeking diligently to fashion the new. Now and then we seem to get a glimpse of our leader—as when Henry Grady, with his golden tongue and free, spacious spirit, arose upon the South—a radiant prophecy of its future manhood; but it is only a glimpse. The mere industrial man will not answer our need, though there are lands to be tilled and factories to be built, and the madness of exalting empty political pre-eminence above the science that will dignify labor and procure food can never again curse our life. The mere orator or politician or scholar will not do. There must be a complex of all these—the man of free spirit and constructive habit, the man of insight and effectiveness, of utility and beauty, of action and contemplation. He shall, above all, have faith and sympathy with the blundering masses, and shall be endowed with that patient wisdom which can await the unflinching rectitude of public impulse and can keep its faith through unpromising days. Like Fichte at the king's council board, or Luther to the burgomasters of Germany, he shall plead unceasingly and above all for education in the colleges and schools, in the press and in the public library.

If our laws and institutions are not to become the crude experiments of the ignorant or the bold devices of the corrupt; if the South is to outgrow years of economic misconception; if the teachers in our schools are to be true teachers, educated men rather than party chieftains or untrained place-seekers, they must lead our civilization. The potential of trained mind must constitute the test of true leadership in the South hereafter. The popular contempt for higher education and the popular pride in the self-made man is always widespread and strong among untrained people. The feeling is a sort of retribution upon scholarship and educated power for its cowardice and selfishness, but it is none the less defiance of common sense. The educated man may not always be in place, but he is sooner or later in power. The higher education is the dynamic element in the life of the community, invigorating the schools of the people, bravely struggling to elevate the common standard of living, supplying the state with its teachers in the schoolroom, the press, the pulpit, the family.

Out of the universities of the world have come its creative movements and men—religious freedom in the old world and civil liberty in the new. Modern Germany is the child of her universities, and relies

more firmly for her permanent power upon them and their 28,000 students than upon her invincible soldiery. Blot out the influences of Harvard and Yale and the colleges of the Atlantic seaboard, and what art can estimate the loss in moral elevation, practical power, or national character? The great Columbian Fair, with its splendor and beauty, will fade away as a dream, but its neighbor, the University, will shape Western life for unnumbered generations. Wherever tyranny has sought to oppress the weak or ignorance to rule the wise; wherever the borders of light have needed to be enlarged or ancient and prosperous shapes of wrong to be cleansed from the land, the gray walls of the university have yielded up its spiritual battalions—strong in the steadfast purpose and cultivated brain—discoverers of thought, conservators of truth, stimulators of mind, sowers of seed that will bear fruit in a fairer time. The feeling is instinctive that men of this stamp and quality must serve a state in epochs of downfall and trial. Humboldt and Stein, the men of Leyden and the English of the Reformation, felt that times of national crisis and sorrow demanded that life should attain the highest standard, not only to prevent disaster but to insure existence. The South has not failed in this feeling, as its brave efforts to establish and maintain schools and colleges for both races quite eloquently show; but the needs of southern society are so great, her young men seeking training are so countless, the work of all the colleges is such a fraction of what is left to be done, the disheartening rivalries and bickerings among the colleges themselves are such distressing proofs of the need of higher education, that it has seemed best for me to leave the question of technique and administration to wiser men, and, even in this presence, to plead for the thing itself.

We are not all of one mind as to how the great need shall be supplied. Shall the organized state trouble itself about this matter, or shall it be left to private initiative? There are those who insist that this vital thing is not a concern of the states, whose highest functions they declare are symbolized by the policeman's club or the law's penalty. And then, there are the prosperous communities, with amassed wealth and settled material skill, who say to us that we must wait upon the impulses of philanthropy or the activities of the church for our educational foundations. But the nature of the state is at variance with the limitation of its powers to civic regulation, and the instinct of civic self-preservation decides against trusting wholly to individual generosity or ecclesiastical agencies for an universal social necessity. The state is not the government alone; it is the will of the people expressing itself in beneficent institutions as well as in penal or protective codes. The protective function of a state, indeed,

may disappear as reason advances, but the loftier educational function will increase as social relations grow in complexity.

From the standpoint of right there is no power to which the state can delegate its duty and power to educate, for there is no higher power than the state. If there is a higher power in the state than state, then that power is the state. From the standpoint of political common sense the agent of social salvation should be at least as potent as the extent of social peril. Our social peril is superlative, involving education or migration or revolution. The most potent conceivable agent is the state, which is concerned about and surely is responsible for its own life. Therefore it is the all-powerful state that must maintain itself against vital danger. If it be conceded that the youth of a commonwealth have the same right to be educated that they have to be free, then it must also be conceded that the state is responsible for and alone has the power to guarantee the granting of this sacred right. To those who concede the state's right and duty to educate in the primary education and deny it in the higher, it may be answered that an argument for any education is an argument for all education. If the state has a right to educate at all, it likewise has the right to determine the extent and character of that education. All knowledge is comparative, the higher education of one age becoming the lower of the next, and there can be no dead line in learning at which knowledge ceases to be good and becomes useless. The three "R's" are indispensable; but mere reading is not reading with profit, and the one is as indispensable as the other. Higher education simply means more education, better education, completer education for a completer life. It is not a cult for the few, nor a caste for the wealthy, nor a college for the exclusive. It is the training ground for the people, and is the essence of democracy in its purposes and results.

In my own state of North Carolina, up to the Civil War, there was a widespread feeling that the ruling class was confined to a few families of ability and wealth. In the early days of the century it was true, and necessarily true, for the influential and wealthy classes alone could command the advantages of education, and education finally rules. The enlightened policy of the modern state, knowing no class and knowing that those who most need help are least able to help themselves, cheapens the cost of this priceless thing and offers it to the aspiring of all ranks who feel within them the promptings of power and yearn for the higher life of useful action. As a result of this leveling process, introducing the higher test of fitness and ability, side by side in the various fields of endeavor and in the high places sit

men of all ranks and all degrees of wealth advancing the life of the state.

Let me not be understood in pleading for the higher education as underrating the lower, for there is no essential distinction between the two. The state cannot be interested in one and not in the other, for they are one and indivisible. A system of education all universities and no primary schools would be a crime, as a system all primary schools and no university would be a farce. It is simply a question of sequence. The educative impulse is from above downward and not from below upward, and the two impulses reinforce and enrich each other.

In the old southern life in every hamlet and community were to be found men and women of the rarest culture, but all around, giving color and tone to the whole, moved the untaught throng. The supremest need of the new life is the lessening of this inequality by the presence, in large numbers, in all elements of the population, of men and women of thoughtful, independent mind, of trained consciences and habits and hands, who can bring things to pass. This can only issue out of the higher education reacting upon the lower, lifting the whole to a higher common level.

The permanent forces in this process are, first and foremost, the state universities and colleges supported by taxation and expressing the Christian tendency of the brotherhood of men, and, secondly, the endowed institutions supported by enlightened philanthropy. By universities I do not so much mean these vast and varied foundations whose chief aim is to extend the boundaries of thought, to add to the sum of knowledge, but those institutions which can aim to make broad-minded men of large views, high ideals, lofty patriotism, and scatter them over the land as salt among the people, an influence to purify and preserve—centers of independence of thought and personal responsibility.

There is no call among us for a multitude of new foundations, unless it be for institutions for the training of teachers. We need rather to expand and enrich and liberalize the old foundations. There are two obstacles in the way of this result. The popular abstract hatred of taxation which enables the enemies of the state schools to confuse the thought of the people and to make them regard all taxation as a curse rather than as organized corporate wisdom, hallowed by Christianity, struggling to secure for the children a needful thing beyond individual power.

Secondly, the failure thus far in our development to find the golden mean between the individualism which preserves liberty and the individualism which paralyzes concerted action. Still partially

rooted in our life is the fatal thought that every man should educate his own child, or leave him uneducated if it be his will or misfortune.

Emphasized by poverty, this conviction still stays the hand of giving and belittles the glory and gladness of helping others to help themselves. We will do well to labor and pray for the death of this sentiment. We would be mad to cease state effort and demand endowment at the point of a subscription list.

Bishop Potter, in a recent utterance, has declared that the darkest day for any people would be the day when they did not possess an ideal university. And by an ideal university he meant any group of free, simple, unhampered men seeking truth for truth's sake; "waiting patiently on their bended knees before the shut doors of the Kingdom of Knowledge;" getting their only reward in the thrill of the human soul in its contact with verity; ignorant and careless of the moment when their theoretic truth merges into fact, and, in the form of mighty engines, or stately ships, or roaring looms, blesses the world. There can be no fairer picture on earth than this, and such men are indeed the aristocracy of the world. But there is one thing greater than truth, and that is humanity. The southern university may well cherish this serene ideal and incorporate in its organization the creative impulse and the spirit of inquiry and investigation, but its first thought must be about its environment, out of which it must grow, and by which it must do its duty before it can erect a beautiful aristocracy of scholarship. Once we were aristocratic in government and education, but now we are democratic in both. At this stage of our culture, when millions are to be impressed with the importance of knowledge, the southern scholar must forego his office of prophet and seer and become ruler and reformer. Southern universities and colleges must do the work of social regenerative forces, reaching out directly into the life of the people, making known how much better light is than darkness, and how sweet it is for the eyes to behold the sun—ennobling the poor man's poverty and spiritualizing the rich man's gold.

Let it be remembered that the future seems to belong wholly to democracy. Only a few of our universities can hope to unite both of the functions of the true university, viz., the making of pure scholars and the making of true leaders and missionaries in the great democratic crusade of arousing the intellect of a whole people.

Each institution should ask in which direction its duty lies. In the South both the opportunity and duty are equally clear and plain. President Dwight, Seth Low declares, claims that Yale has always been a school for captains. Southern universities must have the same aim—captains of industry, captains of thought, of civic virtue, of

enthusiasm and faith; who shall testify to the people the value of intellectual pursuits and the beauty of truth; who shall restrain the narrowness of misunderstood creeds, and proclaim that education is for no particular class. And, finally, our universities must interest themselves in the things which interest the people, no matter how homely or prosaic or far removed from Olympus—the negro's cabin, the factory child, the village library, the prices current, the home, the field, and the shop. We must teach the people and the people must teach us, and in this way we may hope to see high social and civic ideals possess the minds of the great majority.

I sometimes think that our brethren of the North and West do not fully comprehend how ripe the time is, and how hard the struggle for the fruitful doing of such work. Individuals and communities cannot be forced into power, or culture, or effectiveness, or skill. The desire for these good things must go before their realization. For a glimpse of the self-reliance, the eagerness, the bravery of the South, one has only to visit a southern college and see the earnest, thrilling desire for the opportunities which the people believe to be concealed in education. The influences that hinder and obstruct cannot wholly restrain or dull it, and it grows by what it feeds on. It is something of a spirit, I fancy, that lives for us in the glad, grateful words of young Ulrich Von Hutten, spoken to the bright face of Freedom in the morning of the modern world: "Students are blooming; minds are awakening. It is a joy to be alive." It is the spirit which will cause history to place our epic period not in the heroic days of '61 and '65, when our soldiers performed prodigious feats of arms, but in the grinding days of '65 to '95, when they and their sons rose above the difficulties that followed the wake of the war. The going of a southern boy to college is no conventional, quite ordinary, stage in the life of a youth. It is always an event and sometimes a tragedy. It most frequently means that, far away, in the home, the father and mother work harder and rest less, and scrimp here and save there, eating skim milk and oatmeal, and taking counsel in the still hours of the night how they may give their child the privileges they did not know, and the entrance into the clearer, fresher, sweeter, life denied to them. I have seen a feeble woman's face set with stern resolve and glow with ineffable love at the very thought of her boy putting on his armor at the price of her own life. The dignity and power and political value of childhood and youth as the fittest and ultimate concern of the legislator, the preacher, the political economist, the true statesman, has entered our life as one hundred years ago it entered the life of the French, aroused by the mad earnestness of Rousseau and aghast at the havoc of revolution, or as it entered into the thought

of the English a generation later to the music of Wordsworth's immortal ode.

Higher education in the south does not exist for its own glory, for the fame of its teachers, for the pride of sect or for any subjective or selfish reasons. Its aims must be pure public aims, and its service public service.

In portentous era and with inadequate means, it stands for the beneficent force that must transmute the tumultuous, untrained life about it into self-government perfected by education—its material the youth of a new life and a new century, and its strong fortress the self-conscious state, no longer a synonym of rude force, but an expression of Christian sympathy, and unity, and conscience, seeking to realize and show forth the dignity of democracy, the beauty of popular concord and justice, and the majesty of republican citizenship.

THE NECESSITY FOR FIVE CO-ORDINATE GROUPS OF STUDIES IN THE SCHOOLS.

BY W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION.

In the report of the Committee of Fifteen it was partly assumed that the studies of the school fall naturally into five co-ordinate groups, thus permitting a choice within each group as to the arrangement of its several topics, some finding a place early in the curriculum and others later. These five co-ordinate groups were, first, mathematics and physics; second, biology, as including chiefly the plant and the animal; third, literature and art, including chiefly the study of literary works of art; fourth, grammar and the technical and scientific study of language, leading to such branches as logic and psychology; fifth, history and the study of sociological, political, and social institutions. Each one of these groups, it was assumed, should be represented in the curriculum at all times by some topics suited to the age and previous training of the pupil. This would be demanded by the two kinds of correlation defined in that report as (1) "Symmetrical whole of studies in the world of human learning," and (2) "The psychological symmetry of the whole mind." The first stage of school education is education for culture, and education for the purpose of gaining command of the conventionalities of intelligence. These conventionalities are such arts as reading and writing and the use of figures, technicalities of maps, dictionaries, the art of drawing and all of those semi-mechanical facilities which enable the child to

get access to the intellectual conquests of the race. Later on in the school course, when the pupil passes out of his elementary studies, which partake more of the nature of art than of science, he arrives in the secondary school and the college at the study of science and the technique necessary for its preservation and communication. All these things belong to the first stage of school instruction whose aim is culture. Post-graduate work and the work of professional schools has not the aim of culture so much as the aim of fitting the person for a special vocation. In the post-graduate work of the universities the demand is for original investigation in special fields. In the professional school the student masters the elements of a particular practice, learning its theory and its art.

It is in the first stage, the schools for culture, that these five co-ordinate branches should be represented in a symmetrical manner. It is not to be thought that a professional school or a course of university study should be symmetrical. But specializing should follow a course of study for culture in which the symmetrical whole of human learning and the symmetrical whole of the soul should be considered. From the primary school, therefore, on through the academic course of the college, there should be symmetry and five co-ordinate groups of studies represented at each part of the course; at least, in each year, although perhaps not throughout each part of the year.

I have said that the Committee of Fifteen partly assumed all this in regard to the five co-ordinate groups. I meant that the Committee of Fifteen had not only assumed it but to some extent argued the question, for in the detailed consideration of literature, arithmetic, geography, grammar, and history, much pains was taken to show the scope and significance of these studies. Their differences, both objective and subjective, were pointed out. It was shown that their study calls into activity different methods of observation and different trains of thought — different categories of the mind, so to speak. It was shown objectively that these branches cover different portions of the map of human learning, lying in some places contiguous to one another, and sometimes widely separated. Read in the light of this explanation, it will be seen that the Committee of Fifteen intended their report to convince the careful reader that no one of these groups could be taken as a substitute for any other, and that no one of these groups could be spared from a symmetrical whole without distorting the pupil's view of the world. If this assumption of the committee had been fully understood, and if the purpose of the report had been manifest upon the first reading, no one would have found the report lacking in a full treatment of the question of the concentration of studies, and no one would have been disappointed. For it would have

needed no additional argument to arrive at the conclusion that, if there are five co-ordinate groups, neither one of which can be a substitute for the other, and each one of which is essential to the child's symmetrical view of his world, a concentration which subordinated one or more of these groups to another would do violence to the child's nature.

It became painfully evident, however, in the course of the discussion at Cleveland, and subsequently, that the assumption of the committee, as well as the main line of exposition in their report, had been entirely missed by many of the ablest advocates of concentration in studies.

For these reasons I have gladly availed myself of the invitation of your president to present, on this occasion, in a new form, the arguments made in that report, and some statement of the reasons for what is assumed without argument in that report.

I. Commencing with the outlook of the child upon the world of nature, it has been found that arithmetic or mathematical study furnishes the first scientific key to the existence of bodies and their various motions. Mathematics in its pure form, as arithmetic, algebra, geometry, and the application of the analytical method, as well as mathematics in its applied form to matter and force, or statics and dynamics, furnishes us the peculiar study that gives to us, whether as children or as men, the command of nature in this aspect. It is all quantitative. Mathematics furnishes the instrument, the tool of thought, which gives us power in this realm. But useful—nay essential—as this mathematical or quantitative study is for this first aspect of nature, it is limited to it, and should not be applied to the next phase of nature, which is that of organic life. For we must not study in the growth of the plant simply the mechanical action of forces, but we must subordinate everything quantitative and mathematical to the principle of life or movement according to internal purpose or design. But the principle of life, or biology, is no substitute, on the other hand, for the mathematical or quantitative study. The forces, heat, light, electricity, magnetism, galvanism, gravitation, inorganic matter—all these things are best studied from the mathematical point of view. The superstitious savage, however, imposes upon the inorganic world the principle of biology. He sees the personal efforts of spirits in winds and storm, in fire and flowing streams. He substitutes for mathematics the principle of life, and looks in the movement of inanimate things for an indwelling soul. This is the animistic standpoint of human culture—the substitution of the biologic method of looking at the world for the quantitative or mathematical view.

The bare mention of these differences will suffice for the purpose

of proving the necessity of separating these two groups of studies, and for giving each its independent place in the curriculum.

II. The second group includes whatever is organic in nature, especially studies relating to the plant and the animal, the growth of material for food and clothing, and in a large measure for means of transportation and culture. This study of the organic phase of nature forms a great portion of the branch of study known as geography in the elementary school. Geography takes up, also, some of the topics that belong to the mathematical or quantitative view of nature, but it takes them up in a new combination with a view to show how they are related in organic life—the needs of the plant, animal, and man. There is, it is true, a concentration in this respect, that the mathematical or quantitative appears in geography as subordinated to the organic life; for the quantitative, namely, inorganic matter and the forces of the solar system, appears as pre-suppositions of life. Life uses this as material out of which to organize its structures. The plant builds itself a structure of vegetable cells, transmuting what is inorganic into vegetable tissue. So, too, the animal builds over organic and inorganic substances, drawing from the air and water and from inorganic salts and acids, and by use of heat, light, and electricity, converting vegetable tissue into animal tissue. The revelation of the life principle in plant and animal is not a mathematical one. It is not a mechanism moved by pressure from without or by attraction from within. It is not a mere displacement, or an aggregation, or anything of that sort. In so far as it is organic there is a formative principle which originates motion, and modifies the inorganic materials and the mere dynamic forces of nature, giving them special form and direction so as to build vegetable or animal structures.

Kant defined organism as something within which every part is both means and end to all the other parts; all the other parts function to build up or develop each part, and each part in its turn is a means for the complete growth of every other part.

These two phases of nature, the inorganic and the organic, exhaust the entire field. Hence a quantitative study (conducted in pure and applied mathematics) and biology (or the study of life in its manifestations) cover nature.

It has been asked whether drawing does not belong to a separate group in the course of study, and whether manual training is not a study co-ordinate with mathematics. There are a number of branches of study, like drawing, manual training, and physical culture, and such matters, which ought to be found in every well-regulated school, but they will easily find a place within the five groups as far as their

intellectual coefficients are concerned. Drawing, for instance, may belong to art or aesthetics on one side; but practically it is partly physical training, with a view to skill in the hand and eye, and partly mathematical, with a view to the production of geometric form. As a physical training its *rationale* is to be found in physiology, and hence it belongs in this respect to the second phase of the study of nature. As relating to the production of form, it belongs to geometry and trigonometry and arithmetic, or the first phases of nature—the inorganic. As relating to art, or the aesthetic, it belongs to the third group of studies, within which literature is the main discipline. But besides literature there are architecture, sculpture, painting and music to be included in the aesthetic or art group of studies. Manual training on the other hand, relates to the transformation of material such as wood or stone, or other minerals into structures for human use; namely for architecture or for machines. It is clear enough that the *rationale* of all this is to be found in mathematics; hence, manual training does not furnish a new principle different from that found in the first or the second study relating to nature.

III. The first study relating to human nature as contrasted with mere organic and inorganic nature is literature. Literature, as the fifth highest of the fine arts, reveals human nature in its intrinsic form. It may be said in general that a literary work of art, a poem, whether lyric, dramatic or epic, or a prose work of art, such as a novel or a drama, reveals human nature in its height and depth. It shows the growth of a feeling or sentiment first into a conviction and then into a deed; feelings, thoughts, and deeds are thus connected together by a literary work of art in such a way as to explain a complete genesis of human action. Moreover, in a literary work of art there is a revelation of man as a member of social institutions. The nucleus of the literary work of art is usually a collision of the individual against some one of the social institutions of which he is a member; namely, a collision with the state, with civil society, or with the church. This collision furnishes an occasion for either a comic or a tragic solution. The nature of the individual and of his evolution of feeling into thoughts and deeds is shown vividly upon the background of institutions and social life. The work of art, as a piece of music, painting, sculpture, or architecture, belongs to the same group as literature, and it is obvious that the method in which the work of art should be studied is not the method adopted as applicable to inorganic nature or to organic nature. The physiology of a plant or an animal and the habits and modes of growth and peculiarities of action on the part of plants and animals are best comprehended by a different method of study from that which should be employed in studying the work of art.

The work of art has a new principle that transcends life. It is the principle of responsible individuality and the principle of free subordination on the part of the individual to a social whole. It is, in fact, the exercise of original responsibility in opposition to a social whole, a repudiation of the proper degree of subordination, that makes the content the work of art. Further discussion is not necessary to show how absurd would be a purely mathematical treatment, or a biological treatment, of a work of art. Mathematics and biology must enter into a consideration of works of art only in a very subordinate degree. It would be just as absurd to attempt to apply the method, in which a work of art should be studied, to the study of an organic form or to the study of inorganic matter and forces.

IV. Our next co-ordinate branch includes grammar and language, and studies allied to it, such as logic and psychology. In the elementary school we have simply grammar. Grammar treats of the structure of language. There is a mechanical side to it in orthography and a technical side to it in each of its phases. But one cannot call grammar in any peculiar sense a formal study any more than he can apply the same epithet to natural science of any kind. Natural science deals with the laws of material bodies and forces. Laws are forms of acting or of being, and yet by far the most important content of natural science is stated in the laws which are discovered. So in the studies that relate to man, the forms of human speech are very important. All grammatical studies require a two-fold attitude of the mind, one towards the sign and one towards the signification; the shape of a letter, or the form of a word, or the peculiarity of a vocal utterance—these must be attended to; but they must be at once subordinated to the significance of the hidden thought which has become revealed by the sign or utterance. The complexity of grammatical study is seen at once from this point of view. It is a double act of the will, focusing the attention upon two different phases at once; namely, upon the natural phase and the spiritual phase, and the fusion of the two in one. Looking at this attitude of the mind,—this method of grammatical study—we see at once how different it all is from the attitude of the mind in the study of a work of art. In grammar we should not look to an evolution of a feeling into a thought or a deed; that would be out of place. But we must give attention to the literal and prosaic word written or spoken, and consider it as an expression of a thought. We must note the structure of the intellect as revealed in this form. The word is a part of speech having some one of the many functions which the word can fulfill in expressing a thought. Deeper down than grammatical structure is the logical structure, and this is a more fundamental revelation of the action of

pure mind. Logic is, in fact, a part of psychology. Opening from one door toward another, we pass on our way from orthography, etymology, and syntax to logic and to psychology. All the way we use the same method. We use the sign or manifestation as a means of discovering the thought and the scientific classification of the thought.

Much has been said in the report of the committee of fifteen on the abuse of grammar in the study of literary works of art. The method of grammar leads to wonderful insight into the nature of reason itself. It is this insight which it gives us into our methods of thinking and of uttering our thoughts that furnishes the justification for grammar as one of the leading studies in the curriculum. Its use in teaching correct speaking and writing is always secondary to this higher use, which is to make conscious in man the structure of his thinking and expression. Important as it is, however, when it is substituted for the method of studying art it becomes an abuse. It is a poor way to study Shakespeare, Milton, Chaucer, and the Bible, to parse them grammatically or analyze them, or to devote the time to the philological peculiarities, the history of the development of language, or such matters. The proper method of studying the work of art is not a substitute for a grammatical study; it does not open the windows of the mind towards the logical, philological, or psychological structure of the human thought and action.

V. There is a fifth co-ordinate group of studies, namely, that of history. History looks to the formation of the state as the chief of human institutions. The development of states; the collisions of individuals with the state; the collisions of the states with one another—these form the topics of history. The method in historic study is different from that in grammatical study, and also from that in the study of literature and other works of art. Still more different is the method of history from those employed in the two groups of studies relating to nature, namely, the mathematical and the biological method. The history of literature and science has many examples of misapplications of method. For instance, Buckle, in his "History of Civilization," has endeavored to apply the biological method, and, to some extent, that of physics, apparently thinking that the methods of natural science, which are so good in their application to organic and inorganic nature, are likewise good for application within the realm of human nature. The reader of Buckle will remember, for instance, that the superstitious character of the Spanish people is explained by him as due to the frequency of earthquakes in the peninsula. In selecting a physical cause for explaining a spiritual effect, Mr. Buckle passed over the most obvious explanation, which is

this: The people of Spain were for many centuries on the marches or boundaries of Christian civilization and over against a Moslem civilization. Wherever there is a borderland between two conflicting civilizations, either political or religious, there is a sharpening of the minds of the people so far as to produce the effect of opposition and bigotry. A continual effort to hold one's religious belief uncontaminated by the influence of a neighboring people leads to narrowness and to a superstitious adherence to forms. Narrowness and bigotry in religion are the foes of science and the friends to all manner of superstitions.

Mr. Buckle's work has interested people very much because it is an attempt to bring the methods of natural study into the study of human history. But it cannot be regarded as anything more than an example of an attempt to substitute for the true method in history a method good only in another province.

In biology the whole animal is not fully revealed in each of his members, although, as stated in Kant's definition, each part is alike the means and the end for all the others. The higher animals and plants show the greatest difference between parts and whole. But in history it is the opposite. The lower types exhibit the greatest difference between the social whole and the individual citizen. The progress in history is toward freedom of the individual and local self-government. In the highest organisms of the state, therefore, there is a greater similarity between the individual and the national whole to which he belongs. The individual takes a more active part in governing himself. The state becomes more and more an instrument of self-government in his hands. In the lowest states the gigantic personality of the social whole is all in all, and the individual personality is null, except in the person of the supreme ruler and in the few associated with him.

The method of history keeps its gaze fixed upon the development of the social progress which it makes in realizing within its citizens the freedom of the whole. This method, it is evident enough, is different from the literary; different from the grammatical; different, also from the biological and the mathematical methods. In history we see how the little selves, or individuals, unite to form the big self, or the nation. The analogies to this found in biology, namely, the combination of individual cells into the entire vegetable or animal organism, are all elusive so far as furnishing a clue to the process of human history.

The question might arise where religion would be found in these co-ordinate branches. Religion would, I think, make a sixth co-ordinate branch if it were introduced into the school, for religion

persistently looks at every thing and event, every feeling, thought and deed in its direct relation to the Divine Reason. This is evidently a method very deeply separated from the methods in any one of the five co-ordinate branches of studies that have been mentioned in this paper. It is so different, in fact, that it furnishes a ground for removing the study of religion from the school in which the other branches are studied. The method of religion is essentially the method of authority. That of the study of science is essentially that of critical alertness and personal verification. The scientific method of mind is the most hostile of all to the religious. The scientific method saps all authority as such. The mathematical is to be included under the scientific method. So, too, is the grammatical, but not so the literary and historic methods. Literature professedly deals in fiction; in ideal presentations; in artistic wholes which are not found in nature. History, on the other hand, deals with authorities for the events which it narrates. Its dealing with historic authorities resembles in some respects that followed in the study of the Holy Scriptures; but, in other respects—namely, in the treatment of the evidences—it resembles the scientific study of data derived from the observation of nature. But religion demands from first to last a complete surrender of the mind to the authority of revelation. On the one hand it is claimed by those who believe in separating the school and the church that religious instruction should be surrounded by the solemnities of the church, and that it should not be approached in the flippant attitude of one coming from the lesson in mathematics or natural science, or even literature, grammar or history. On the other hand, those who claim for the school a sixth co-ordinate branch of study, namely, religion, think that this argument for the separation of methods so widely asunder as those of religion and science has been entirely overrated. But they, too, would carefully guard against the encroachment of the religious mode of study into mathematics, botany, history, and grammar. They would admit that the co-ordination is complete, and that the separation of methods is necessary in school.

Casting a hasty glance in conclusion over the course of this discussion, we can see what is the relation of this study of educational values to the question of child study and other topics in psychology, as well as the Herbartian principle of interest. First and foremost the teacher of the school has before him this question of the branches of learning to be selected. These must be discovered by looking at the grown man in civilization rather than at the child. The child has not yet developed his possibilities. The child first shows what he is, truly and internally, when he becomes a grown man. The child

is the acorn. The acorn reveals what it is in the oak only after a thousand years. So man has revealed what he is, not in the cradle, but in the great world of human history, and literature, and science. He has written out his nature on the blackboard of the universe. In order to know what there is in the human will, we look into Plutarch's "Parallel Lives." To see what he has done in philosophy and science we read Plato, Aristotle, Leibnitz, and Hegel. For science we look to the Newtons and Darwins. We do not begin therefore, with child study in our school education. But next after finding the great branches of human learning we consider the child and how to bring him from his possibility to his reality. Then it becomes essential to study the child and its manner of evolution. We must discover which of its interests are already on the true road towards human greatness. We must likewise discover which ones conflict with the highest aims, and especially what interests there are which, although seemingly in conflict with the highest ends of man, are yet really tributary to human greatness, leading up to it by winding routes. All these are matters of child study; but they all presuppose the first knowledge, namely, the knowledge of the doings of mature humanity. There can be no step made in rational child study without keeping in view constantly these questions of the five co-ordinate groups of study.

DISCUSSION.

HERMAN T. LUKENS, Clark University, Worcester, Mass.—Dr. Harris is undoubtedly one of those who "know, and know that they know," and he usually means more than he says.

Lincoln used to begin his speeches in court by frankly acknowledging the sound arguments made by the opposing counsel, and saying, "Now, I reckon that 's true, too, your honor;" until, after yielding point after point in this way, he seemed to have no case at all. Yet Lincoln almost always won those cases. In the plan Dr. Harris has just presented, the points that I shall not only not refute, but, on the contrary, wish to emphasize,—because "they are true, your honor,"—are as follows:

I. Grouping of studies is the best solution of the pressing question of an over-crowded curriculum. Grouping brings out relative importance and secures proper perspective. The course of study can be expanded by differentiating the studies in each group, or it can be contracted by limiting their number, and in either case the curriculum remains organic, complete and symmetrical. The principles advocated seem, therefore, to apply equally well to the country school and the city school, the primary and the high school.

II. Dr. Harris is right also in seeking for the basis of the received course of study in a classification of the external culture-material. Ever since Rome, 2100 years ago, first exchanged her own national, indigenous curriculum and domes-

tic education for the foreign, exotic culture of Greece, the world has been struggling with its inheritance of objective culture-material. Dr. Harris is describing actual conditions when he says, "The pupil has a teacher to direct his studies and instruct him in the proper methods of getting out of books the wisdom recorded in them." The Chinese are one of the foremost nations in recognizing this. Their very name for child or pupil means "heir of all the ages," and the schoolmaster aims to give this wisdom in a systematic manner.

III. The convincing way in which the classification of subjects relating to man is presented has something very fetching about it, and it is certainly suggestive of a good objective correlation of these subjects.

IV. The scheme lacks completeness. For beside the five groups there are extras, like industrial drawing, manual training, music, physical culture, etc., which are not provided for in the classification, and which are to be taught as "information studies or as miscellaneous exercises." But this inconsistency redeems the plan, and, as Emerson tells us, inconsistency is a characteristic of which we need not be ashamed.

1. But this co-ordination is merely a classification of external knowledge, and this is my first objection. I believe Dr. Harris is here laying the emphasis on the wrong side. The expression so often used, that "these five groups are five windows of the soul," seems to be misleading. They are five external fields of knowledge, and have nothing whatever to do with the question of what mental powers are exercised in their study. It is a blunt, rough statement of fact, and a criticism of the present rather than the raising of an ideal, when we are told "the school causes its pupils to put on the forms of thought given them by the teacher and by the books they use." This condition is most surely reached by mechanical teaching, narrow views on the part of the teacher, and strict following of the text-book, and is something that all leaders in education should strive to their utmost to counteract.

2. The plan assumes without the least compunction an exact correspondence between "the symmetrical whole of studies in the world of human learning" and "the range of studies demanded by psychological symmetry." First, the adult field of objective knowledge is classified; secondly, it is assumed that the needs of the child mind correspond to these groups of studies; and thirdly, that the mind grows evenly or harmoniously in all essential directions at once. These assumptions are totally false, and really make the whole heart of the matter. We know that the mind, like the body, has its growth periods, and that mental growth is not symmetrical. The emotional nature does not develop evenly with the intellectual capacity; the memory and the will have different nascent periods; the best time for studying language is not the best time for studying nature.

3. This plan claims to have surveyed the whole field of actual and possible knowledge and to have "shut it in." We are told that "the completeness of the plan is demonstrated for all time." As new fields of knowledge and action are opened up in the future, we shall find that they are all provided for in this plan, foreordained and prearranged to fit into their several places. Now, I cannot help feeling somewhat like the claustrophobiacs, who are afraid of inclosed spaces. It makes me feel as though some one were saying the apparent sky and horizon are the bounds of the universe. I believe it has an enlarging—yes, in the best sense, a liberalizing—influence on human beings to look off the earth upward between the stars into infinite space, and feel that there is no boundary, no limit, no danger of being cramped for room, no possibility of getting an idea too large to correspond with reality.

4. Contrast for a moment the cross-section of the curriculum here advo-

cated with the longitudinal section as sketched in the famous eighth book of Aristotle's "Politics." The genetic curriculum there outlined is concerned mainly with the question of correlation of studies in sequence. First comes care of the body in infancy, with no continued studies nor compulsory work. Later, in boyhood, lasting till puberty at fourteen or fifteen years of age, the care and training of the passions and the formation of proper bodily habits receive greatest attention. At puberty three years are to be spent in severe discipline of the intellect, after which a course of hard exercise and strict regimen, practical affairs of state, public and private business, are relied upon to train the will and make men of action.

To my mind such a course of study raises far more vital questions than any considerations in classification of external culture-material. The Greeks had a great advantage over all that have come after them in that their culture was national and spontaneous. They sought to make education a means of aiding everyone to reach the highest possible phase of development by the unfoldment of his own inborn powers. The aim of education was to make men "love and hate aright." When the Romans borrowed Greek culture they started that disastrous experiment, which every nation since has followed, of making the acquirement of external culture-material the end as well as the means of education.

I do not see how any one who appreciates the difference between external whitewash and internal culture and is thoroughly in sympathy with the present movement for child-study in education can think that an objective classification of knowledge is the main question concerning the curriculum. The stages of growth in the child, its nascent periods for language, music, drawing, etc., the collecting manias, the spontaneous interests of the child, the best period for hard discipline of the intellect,—whether, as Aristotle says, just at the beginning of puberty, or as others think, later, after the first onset is past and the social emotions and expanding aspirations of adolescence have begun to well up in the soul,—these are pressing questions that must yet be settled by patient, honest study of the realities with which education has to deal.

Not even in manual training and physical culture are the data thus far collected sufficient for drawing up with any confidence a rational course in these subjects based on the physiological facts of child development. Still less is it yet possible to make such a course in the mental and moral studies. Yet for this very reason these questions are fullest of hope, suggestion and inspiration for all of us, and that is why I for one feel more interest in them than I do in staking off the bounds of human knowledge.

WHAT CORRELATIONS OF STUDIES SEEM ADVISABLE AND POSSIBLE IN THE PRESENT STATE OF ADVANCEMENT IN TEACHING.

BY C. B. GILBERT, SUPERINTENDENT OF SCHOOLS, ST. PAUL, MINN.

In a recent number of a leading educational periodical the distinguished editor¹ sadly announces the death of Apperception and pronounces a eulogy over Correlation moribund. For Correlation is dying; and yet, he has not been wholly unkind to us. Let us at least speak well of him beside his deathbed.

I can hardly believe that our friend the editor meant quite what he said. He must have been thinking, not of correlation as a spiritual force in education, but of correlation as a catchword; a name to conjure with; something for foolish radicals like your humble servant to talk about in gatherings such as this. If apperception were not dead, I should say that possibly he had not apperceived correlation. Or did he have that higher truth in mind, so beautifully expressed by One who lived long ago, "Except a grain of wheat fall into the ground and die, it abideth alone; but if it die, it bringeth forth much fruit"? For such is, I trust, the future of correlation.

No great truth is productive until it loses its identity, ceases to be abstractly by itself, and becomes absorbed in life. Even Christianity is fruitless so long as it is merely a beautiful doctrine to contemplate, a wonderful philosophy to study, or a refined system of forms and ceremonies. It is only when it dies in these respects that it lives as a constituent and ruling force in life.

Before stating what correlation of studies seem advisable and possible at present, I must make clear what I deem important principles, essential to any wise correlation, the recognition of which will avoid many of the blunders which have placed correlation in a false light; for correlation has been in as great danger from its friends as from its enemies. Premature attempts have been made to crystallize it into systems, to bind it down to mechanical forms, often by those who failed to grasp its spirit aright, resulting in strange and kaleidoscopic courses of study, which have given excuse to its enemies for the claim that correlation means basing school curricula upon artificial and fanciful relations and disregarding essential unities within lines of study. But these things are not correlation any more than bigotry is religion or formalism Christianity.

I would define correlation in courses of study as a recognition of

the natural relations existing among the various departments of human activity, and such an arrangement of these departments for presentation to the child that all his knowledge shall stand clearly in his mind in its true relations to the whole and to each of the parts.

If the child is to go forth from school fitted for a life made up of relations, it is necessary that the knowledge he receives and the activities in which he engages in the course of his preparation shall all have reference to these relations; hence courses of study which determine both the knowledge and the activities must be so arranged that isolated knowledge and reasonless activities shall be impossible.

For, what are the various branches of study? What determines whether a study falls within one branch or another? Merely the point of view. The same object may be studied as belonging to several of the different branches. Dr. Charles McMurry clearly pointed this out in the December number of the *Public School Journal*, using the oak tree as an example, which may be studied with equal propriety from the standpoint of the botanist, of the artist, of the lumberman, of the social scientist, of the meteorologist, of the poet; and each view obtained is but partial. His illustration might have been multiplied infinitely. Man himself may be studied, as to his body, from the standpoint of the physiologist, of the physician, of the employer of labor, of the anthropologist, of the artist, of the cannibal. As to his mind, the study of man classes him with any one of a hundred sciences, from insanity to theology; and there are still unreckoned sociology and all the other studies which treat of his relations with other men, and in none of these is he a whole man. No one represents round truth. For the most part the classifications are arbitrary, were made when the world of knowledge was vastly smaller than it is today, and do not even fairly represent existing conditions; and the child who studies them as separate and distinct branches of knowledge, which will fit him for separate and distinct activities in life, does not get a truthful impression.

Dr. Harris tells us that there are five co-ordinate branches of human learning, and that it is important that all of these receive attention in a scheme of education. No doubt. But it is more important that the essential unity of them all be also recognized, for these five departments are not to be conceived of as parallel lines, extending into infinity and nowhere touching. They are rather the radii of a sphere united at the center in a vital union from which comes all the worth of each, for each is enriched with the richness of all the others.

From the above it will be seen that true correlation is neither artificial nor mechanical; it cannot be fully shown even in the best

courses of study. Primarily it must exist as subjective in the mind of the teacher. If he grasp the essential unities of things it may, to a degree, be made objective and apparent in the course of study, and still more so in the teacher's interpretation of it; but it is more important that the teacher be in himself a correlation of knowledge than that a course of study exhibit it. If teaching is a vital relation between teacher and pupil, and if the end of teaching is the development of the pupil—as Professor Tompkins puts it, “the union between the pupil's real and ideal self”—then the essential thing, so far as knowledge is concerned, is that it shall be correlated in and with the pupil's mind.

If these things are true, as I believe them to be, the first thing which we must do is to train the teachers. They must be filled with a sense of the importance of correlation as a principle. It must become subjective in them. This means a better education for the teachers, that they may have a larger view of the truth. But it is not necessary to wait until we have a more highly educated body of teachers before we begin. The very act of grasping and administering a broad and wisely correlated course of study is in itself a liberal education.

In trying to introduce some of the ideas here expressed I have met with this difficulty. The teachers themselves, trained in the old way, at first failed to comprehend the relations of knowledge—the spiritual, vital relations—a grasp of which is necessary to success in life. But while I have sometimes been discouraged because of this inability of teachers to understand the real purpose of correlation, I have been still more encouraged by the eagerness and enthusiasm with which they have tried to seize the spiritual intent, and by the self-sacrificing devotion with which they have endeavored to fit themselves for the higher work, until I have been ashamed of my lack of faith.

The old courses of study were deadening to teachers as well as to pupils; the new are inspiring truth. Teachers feel that they themselves are growing while leading their pupils to the shrine of truth. The improvement of the teachers, both in spirit and in power, has been one of the most marked effects of improvement in the courses of study. No one can devote his energies first to comprehending and then to imparting the broad ideas implied in a truly correlated course of study without growing in breadth and power from the effort.

Upon the superintendent falls the task of preparing this course of study, which shall furnish material for growth and stimulus to effort to both teacher and pupil; and here we come to the meat of the problem, for even the most thorough students of correlation do not all agree as to what it means and as to how it is to be made effective

in schools. We are as yet seeking for truth, and need to be very honest with ourselves and to keep all our windows open. But a few things seem to me reasonably clear.

The first thing which one preparing a course of study must take into account is the distinction between form and content. This seems to me vital. A correlated course of study must include both co-ordination and subordination; a co-ordination of the great fundamental branches of human thought—the five of Dr. Harris, if you will—and the subordination of those branches which are in nature subordinate. The former constitute the content, the latter the form, of a course of study; or, to put it differently, I use the term content as including those branches of study which possess an intrinsic and fundamental value, and form as including the means by which the essentials are realized. In a general way, the former consists in a consideration of man and the spirit world and of the world of nature, and the latter of the various arts by which man comes to a possession of nature and of himself. Of course, these distinctions are not arbitrary or exact.

A distinction between form and content does not imply that they are to be treated as separate and unrelated entities; that would not be correlation, but disintegration. It rather means that they are to be so related in the teacher's mind, and are to be so presented to the child, that they will always stand in his mind as form and content. He learns to read, not that he may learn to read, but that he may be introduced to the world of literature. He learns to write, not that he may learn to write, but that he may be able to communicate the best that is in him for the benefit of others. I do not mean by this that there should not be direct and thorough drill upon the arts themselves, but that this drill should be given after and not before the child has come to realize his need of a medium of expression. The higher end ennobles the means and makes it worth acquiring.

I have been criticised for drawing this distinction, and especially for saying that the arts are secondary, and that knowledge furnishes the content. My position was not understood. There are three general divisions of the work of education. The first is creating in the child a high purpose; the second is acquainting him with conditions, needs, and possibilities, and the third is furnishing him with the means for the accomplishment of his purpose. But these three are parts of one whole. The second—acquainting the child with conditions, needs, and possibilities; in other words, knowledge—stands as a middle term, creating ideals on the one hand, and suggesting activity, stimulating effort to acquire the means, on the other. Hence, it forms the natural content of his education.

The great reason for placing emphasis upon the distinction between

form and content is the necessity for the comprehension of this distinction by the adult if he is to have a true grasp of values in life. One principal obstacle to the progress of civilization is the failure of men to comprehend the difference between means and ends, between form and content. The average man devotes his energies to the acquiring of that which is, in itself, only a means to a higher end. The eager struggle for money, for power, for social position, which renders so ignoble the life work of most of us, is due to the fact that we look upon these things as ends in themselves, and not as means to higher ends. But what can we expect of men whose early efforts have all been devoted to the acquirement of means as if they were ends?

If the child is taught to read as if the ability to read were the end of his effort; to write, as if fine writing were the best thing that he could do, what reason have we for expecting that the man will look upon money and power and social position as means for helping his brother man? "Life is more than meat, and the body than raiment." Art for art's sake is thoroughly detestable. As well might we say, food for food's sake, or the body for the body's sake. No great work of art, whether in painting, music, sculpture, or literature, was ever great merely because of the artistic skill displayed; rather has its greatness consisted in the noble thought whose expression the artistic skill made possible. This does not mean that skill is not necessary but rather that it must be kept subordinate to the theme. This alone makes it worth while. Tennyson's musical verses did not make "In Memoriam," but they made it possible. For the sake of writing "In Memoriam," of uttering the noble thought that was in him struggling for utterance, it was worth while that the poet should master all the arts of poesy. Nobility of purpose, exaltation of theme, whether in adults or in children, furnish the only true stimulants for laboriously acquiring the arts necessary for adequate expression. This, applied to education does not draw a hard and fast line between form studies and content studies, but relates them properly, so that the child always has before him the worthy aim as an inducement to the acquiring of the adequate means. While this subordinates reading, writing, spelling, and language drill, it does not degrade them. It rather exalts them, since thus alone do they find their true place and are ennobled by a noble purpose.

Let me here say that I do not believe, nor do I mean to imply, that these subordinate branches are to be taught wholly incidentally. It is true that power to read, write, spell, draw, and in the mechanical sense, to use language, is acquired mainly by practice in the use of these arts. It is an unconscious product, just as walking is; still there

is a technique for each of them, knowledge of which adds greatly to the power to use them effectively, and this technique must be taught specifically and thoroughly, but at the proper time and in the proper way; that is, as to time, when the child feels the need of it, that he may better attain one of the higher ends of life.

As to the way, the technique of this art must be so taught as to satisfy this need, so that the child may feel that he is gaining a new power to aid him in the attainment of a desirable end. The amount of attention to be given to this study of technique varies with the age of the child, as indicated by his school grade.

In the primary grades comparatively little attention need to be given to the technique of expression. I am compelled to disagree with the opinion by some inferred from the report of the Committee of Fifteen, that the first three years of school life should be devoted almost exclusively to the acquisition of this technique, with only incidental and casual attention to the content of the course of study. I would reverse the order. It is true that in these three years the child should acquire a fair possession of this technique; but at his age, when he is little able to grasp philosophical principles and to undertake effort with a view to remote results, it is all the more necessary to appeal to his interest. The young child will best acquire the necessary arts incidentally. The ends for which he works must be evident. Place before him a content to him valuable and interesting and immediately obtainable, and he seeks it through the medium of the necessary arts. The adult, the young man in college, may study mathematics for the sake of training his mind; the child, not so. The end that he seeks is today, and he must have the means at once.

I would say, then, that in the first years the course of study should have for the child the richest content which he is capable of grasping. Thus he will best gain possession of the various necessary arts, and, what is still more important, his mind will receive a better training and will be filled with richer thoughts, and he will emerge from these years of school with a broader horizon and a more eager desire to continue his education. Hence in these earlier years especial attention should be given to the study of nature and of literature—the lines of study that are at any age most broadening. As the child advances from grade to grade more attention may be given to technique, as he becomes able to see the relations between form and content; that is, to understand the reasons why certain forms of expression are better than others.

I have dwelt thus upon the relations of form and content because I deem it the first and most important correlating principle. It remains to consider briefly co-ordination, or the relations of the co-or-

dinate branches of human learning in the course of study. As I have said, these must all be taken into account, but not as unrelated. Here even the best of our old courses of study broke down. They aimed at the education of the faculties, and ignored the unity of the human soul. They recognized variety, but not variety in unity.

In the first place, a broad course of study should be so arranged that naturally related parts of the different co-ordinated branches may be taught at the same time. I say, naturally related; not artificially or mechanically, but spiritually, if you will. Our old courses of study were full of absurd instances of variety without unity. It is no uncommon thing for a class to be studying at the same time the geography of Africa, the history of England, the plant life of Minnesota, while having for their reading lesson the story of Peter the Great; the subjects having no relation, either artificial or natural.

On the other hand there are new courses of study which are as absurd—correlation run mad, as I have heard it described. I remember hearing of a day's lesson in a certain over-correlated city. The subject was the crow. The children studied the crow, read about him, drew him, wrote about him, counted him, added, subtracted, multiplied and divided him, bought and sold him, and, for aught I know, carried him out on a crowbar. Here was no fundamental or vital relation. The co-ordinating principle was trivial and unsound, and doubtless several good lessons in history, reading and arithmetic were spoiled for the sake of the crow.

I have said that naturally related principles of the various co-ordinated branches should be taught at the same time, but I do not mean that the relations are necessarily time relations. These would frequently be artificial, and not even suggest the spiritual unity; and this, it seems to me, is one of the criticisms to be made upon a course of study concentrated about history, for the relation here inevitably is mostly a time relation, which may be best and may not.

I will attempt to make my thought concrete by an illustration taken from the schools of my own city of St. Paul. A seventh grade class regularly studies the history of the United States, the geography of North America, the writings of certain American authors, and local geology. These studies may be so timed as to suggest inevitably fundamental and vital relations. To begin with, the class are taken out for a field lesson upon the banks of the Mississippi. Here they see the fundamental rock strata; observe the great valley worn out by the waters; get specimens of rock containing the earliest fossils; see the broad plains stretching out into the boundless prairies, whose soil was deposited by the glaciers. They learn how the great Mississippi valley with its broad adjacent plains, was formed; that is, they get a

concrete knowledge of the physical geography of this part of the world. This leads both to the history and political geography. They learn not only the effect of early explorations on this river and on the Great Lakes, but they see why those explorations were made. They not only find out how these great plains were produced, but see in them the reasons for the migrations of so many people and for the vast civilization growing up in the great West. The struggles of the early settlers are emphasized by the poem "Evangeline," and the travels of Irving and others, so that a complete picture of the growth of Western civilization, with an understanding of its cause, is left upon the minds of the children. A taste has been created for investigation and a love for literature, while, also, all this rich content has served as a basis for numberless lessons in reading, writing and language.

I offer this illustration hesitatingly, for fear that some may say that it is open to the criticism of emphasizing artificial relations. If any so conceives it, I am misunderstood. The relations that I would emphasize are mostly those of cause and effect, though not altogether. The aim is to produce unity of idea in the minds of the children. Each child should have a single vivid picture, including objects from all those co-ordinate branches, which would be worth infinitely more than any number of isolated facts, even though they included all of history and all of geography.

Now, as to the correlating principle for the co-ordinate branches, it must be evident that I do not believe in the concentration of the course of study about any one branch. No one branch of human learning is clearly enough defined, or essential enough in itself, to be the center of a course of study for the child. No one is so much more intimately related to the child than all the others that it can determine for them their arrangement and the selection of topics from them. The only centralizing relation in the education of the child, in reference to his destiny (and, hence, the first principle of co-ordination as to its breadth), is that indicated in the Committee of Fifteen's report, namely, the relation of the child to his material and spiritual environment.

Psychology, not history, not science, determines also the longitudinal correlation of the course of study. By psychology I do not mean the old psychology which is merely deductive logic applied to certain assumed mental phenomena, but the actual study of the child. Depending upon this, the correlated course of study of the future will determine what shall be given the child at each stage of his development.

There are many things concerning correlation about which there

is still uncertainty, but as to what we can do in the immediate future, I feel reasonably sure upon these points:

1. We must insist that the only correlation to be considered consists of the recognition of the natural and spiritual relations already existing in the world.

2. That these relations exist, if at all, in the human mind, and hence must become subjective in the teacher; then, in so far, as possible, objective in the course of study; then, again, subjective in the child.

3. That the relations to be considered in the course of study must include both subordination and co-ordination—a subordination of form to content and a co-ordination of the essential departments of thought.

4. That the only center for a correlated course of study is the child—the child whose rights have so long been ignored, whose nature has been so blindly misunderstood, whose soul has been so dwarfed and maimed in the vain effort to accommodate him to a ready-made course of study, and bind him down with the chains of logic, to make him fit into the form of a cast-iron frame, miscalled psychology. Yes, fellow teachers, the child must be our first study; and when all the branches of human learning with which he can be brought into touch, all the activities to which he may be stimulated, are properly correlated with the demands of his nature, we will find that they are correlated with one another, and the miracle will have been wrought.

DISCUSSION.

SUPERINTENDENT W. P. BURRIS, Bluffton, Ind.—In the statement of the question under consideration there is the implication that an ideal scheme of correlation is to be modified in its application to suit the limitations of teachers. We think this would be unwise, and our discussion will be largely on this point.

In the first place, such a compromising attitude could only give us a caricature of a plan of instruction whose chief claim to recognition lies in the fact that it proposes to unify and economize effort in popular education in order to better realize in the individual the highest aim of life. It is not a "fad" or "novelty" to make school life temporarily attractive. It is not a "pun." It is not an accretion of a system already in practice. It calls for a new elaboration. In the light of new principles it would re-assay the world's educational ore in the crucible of reason and select only the purest gold. It offers a unity whose unifying purpose is to be seen running through the course of study like the scarlet cord through every inch of cable belonging to the English navy. It calls for reorganization, not revision. It seeks to readjust the accents, placing the emphasis where it belongs.

While granting that teachers, generally speaking, are not what they should be, we believe that the adoption of such a scheme as that now proposed would be

the most effective means of raising the profession of teaching that could be employed. We know from observation that it is in itself a revelation to the teacher. Teachers dead in the trespasses and sins of formalism have been raised to walk in newness of life. We cannot raise the school without raising the teacher. We cannot raise the teacher without raising the scheme of instruction—without offering a higher view of the world order. The teacher cannot make study reveal that of which he is himself unconscious. In order to teach others to come into intelligent relations with their natural and spiritual environment, and understand the drama of the yet unfinished creation, it is necessary that the teacher have a well-organized knowledge of the sciences and a keen appreciation of the world's culture. To teach the arts of expression he must be an artist. If we make a demand for such teachers the supply will be forthcoming.

The weakness of the American teacher is his culture. He has been taught that it does not make so much difference what is taught as how. Like the surgeon of whom you have heard, it matters not whether the life be saved provided the operation be brilliant. By all means give us the teacher of liberal culture plus his study of method; but if he cannot have both, give us the teacher of liberal culture.

The system now proposed, however, will give us both. It calls for the culture first, as it should do, and the demand for efficiency in instruction will give us method. We will then have teachers who, as some one has said, can both fly and walk; fly with the seers and walk with the children.

We do not think, therefore, that the greatest gain is to come to popular education by a surrender of any principle which should unify the scheme of instruction. There must be unity. The same cannot be if conflicting systems are mixed for the sake of compromises. Let systems stand or fall according as they are right or wrong in principle. Otherwise we are without anchorage—without basis for the selection of all that pertains to the process of education. Is the nature of the being to be educated not yet understood? Is there no dramatic tendency yet observed in creation which is a clew to human destiny? Are we still without a central aim in popular education? Is there need of a new critique of educational values? Until these questions are answered it is too early to consider the question before us.

We believe, however, that there is substantial agreement, both as to the central purpose of education and the materials for universal culture; as to what should constitute everybody's education—what common ideas and sentiments should form the connective tissue of society. The point of divergence is the basis on which the course of study should be organized; whether it should constitute a logical, philosophical, or psychological unity. All are good, but which is best is the question.

In reference to the first, we can read the handwriting on the wall. The second, while regarding the true relations of thought to form, adopts too general a principle for popular education. It is the true one for the entire field of education, but if followed consistently in elementary education it would compel us to neglect the humanities for the nature studies. The last contains all the good in the other two, and much besides. It renders the iniquities of formalism impossible. It insures teachers of a broad culture, as none other can carry such a scheme into successful practice. It gives the child growing insight into the stream of human culture, the nature through which it flows, and the reciprocal relations of the two. It makes for moral character through instruction by keeping the child as the center of effort.

The principles of this scheme have been considered by almost every educa-

tional meeting—national, state, county and township—for a term of years. They have escaped the critical examination of no chair of pedagogy or educational journal. Others, still, have suspended judgment as to their value until the chain of sequences they have set in motion should be observed in the practice of the schoolroom. We are of this class. The full tale is not yet told, but results fully warrant continuance in the path pointed out. Expression of opinion, progressive and conservative, has had free play. Both have disdained to pass final judgment, but each, recognizing in the other a necessary unit of force, constituting the general power which works out educational changes, has perceived that both may properly give full utterance to innermost conviction, and, in venturing to express mine, I think that the principles of the paper are substantially right. And now that the first rash rush of the Herbartian invasion is past, and some sober concessions have been made for the sins of some of its youthful exponents and some misapprehensions cleared away, this new movement is seen to be but the necessary re-adaptation which orderly progress in education demands.

CONCENTRATION OF STUDIES AS A MEANS OF DEVELOPING CHARACTER.

BY CHARLES DE GARMO, PRESIDENT OF SWARTHMORE COLLEGE, PENNSYLVANIA.

In this topic there are involved the most perplexing problems of pedagogy and psychology. A wilderness of words have been uttered on the subject of concentration since the Cleveland meeting, and as in the days of the sophists each man seems to regard himself as the measure of truth. The problem of the development of character did not begin last year, but had its origin at least as far back as the time of Protagoras, the noblest of the sophists. The possibility of teaching virtue was stoutly maintained by Socrates, but who will assert that he pronounced the final word? Kant emphasized the antithesis between the intelligible and the empirical character, declaring that the seat of morality is in self-determination alone. Modern psychology has tried to learn how character grows by investigating the influence of transient and permanent interests upon the will. I have tried to reconcile experience and reason by showing that the rational, or free will, is by nature subject to evolution, like life, feeling, and knowledge. Is the doctrine of inherent interest, and with it empirical psychology in study, merely an *ignis fatuus*? Are the insight and disposition cultivated by correlating important knowledge in the pupil's mind to be regarded as but fragile reeds for our support? Here is indeed a mare's nest of logical difficulties, but I shall take the Anglo-Saxon's privilege of ignoring them for a few plain considerations that have a manifest bearing in the world of practical affairs.

It might fairly be expected that this paper would devote itself to a psychological analysis, showing just how the organization of knowledge may be expected to influence the growth of character. That work has, however, been attempted by others. I must, therefore, beg the indulgence of those who anticipated such a treatment, since I intend to confine myself to such considerations as appeal directly to experience and current educational thought. Assuming, therefore, what some may regard as the main proposition to be proved, viz., that a rational correlation of knowledge will favorably affect character, three things seem to me to be involved — what we shall correlate, how we shall correlate, and to what end we shall correlate; or, in other words, the kind of character the schools, and especially the city schools, should attempt to develop.

It must be assumed at the outset that a civilized country will, so far as it works intelligibly, develop a character that can work efficiently in a civilized state of society. Persian, Grecian, Roman, Mediæval, Puritan, ecclesiastical notions of character are no longer valid as ends, since the world has long since transcended those conceptions of civilization. But if we look about us we see that on every side, in politics, education, industry, business and common living, the rule is organization. Every enterprise, public or private, is characterized by the idea of regulated co-operation. Institutions are the universal rule. Men work together for common ends in organized groups, both large and small. If, now, it be asked which type of education — that of isolated or correlated branches of study — is most in accord with the methods of modern civilization, I apprehend there can be but one answer. Granted that public education is an important factor in the development of character, it can be seen that any arrangement of study whereby isolation of faculties and knowledge and capacities is promoted works against rather than for the kind of character most desirable under present conditions. It is equally evident, on the other hand, that any organization of studies which promotes insight into modern social life and disposition favorable to its ideals works for rather than against the realization of the institutional type of character.

I cannot in this paper enter upon an extended discussion of the problem of concentration, which I conceive to be such a correlation of subject matter as will tend to make instruction more intelligible, interesting and valuable to the pupil. There is but one line of practical suggestions regarding the kind of correlation available, and presumably of service in the development of character. That I desire to enlarge upon. It appertains to the formation of what may be called apperceptive centers in each prominent branch of study.

Every concrete branch of learning taught in the schools has a series of what may be called root ideas, upon which its significance depends. Sometimes, as in mathematics and the exact sciences, these root ideas are connected by casual or logical relations; sometimes as in history, geography, and literature, no necessary sequence exists. In any case, however, the selection of topics and their sequence in presentation to the child will depend largely upon psychological considerations. The proposition I wish to emphasize is that each topic taught shall be built up into an apperceiving center in the child's mind. An illustration may be taken from geography. The notion "canal" is frequently met with. Upon its first prominent occurrence in the study, let some concrete illustration of the canal be mastered. Some of the prominent elements to be made vivid are as follows: the ditch, the water level and supply, and the locks, which may be represented on the board or modeled from pasteboard by the children. Then the canal boats, their structure and propulsion. Why should mules be so much used in this age of steam and electricity? Finally, the produce carried, its starting point and destination. When a concrete case has been mastered a basis of understanding and interest has been laid for all the varieties of canal in the world. Without departing much from the leading purpose of the lesson, much related information concerning other forms of transportation, may be taught, together with related information about the configuration of the land, the sources of supply for the canal, freight, and so following. In like manner the other agencies of transportation, such as railroads, street cars, elevated roads, ships and steamboats, may be similarly presented. So of a large number of geographical ideas. Arithmetic, too, has its root ideas, as McClellan and Dewey have so well shown in their "Psychology of Number." So, likewise, have grammar, reading, history, botany, zoology. Any teacher can select the important topics in each of these subjects, can build each up into a center of understanding and interest, and can relate these topics to each other within and without the main line of sequence. This form of correlation is assisted by the juxtaposition made natural by common principles of development, as in the theory of culture epochs for culture subjects; but it is not dependent upon such arrangement. This plan renders concentration (or correlation as I prefer to call it) a principle to be observed in the recitation, rather than a program to be followed. The former is available for every teacher; the latter, perhaps, only for the expert.

The conscious building up of apperceptive centers in each subject about which shall be associated striking features of related knowledge has several important advantages. It encourages the teacher to make

his lessons rich with concrete matter and stimulating through their constant challenge to thought. Even the torpid mind awakes to the realization that learning is allied to life, study becomes attractive, insight and interest deepen, and gradually there is developed a permanent healthy attitude of mind toward life and its work, its duties and opportunities. Sane views of conduct are generated; healthy modes of feeling become habits of the mind. The child becomes, in short, a citizen; not a mere individual inhabitant.

More, however, than we need to construct a theory of concentration do we need to reconstruct our theory of character. This assertion is based on the fact that our prevailing ideals of character were formed when society in this country was in its pioneer state. At the beginning of the present century only some 3 per cent. of our population were in cities, and even then, these so-called cities were little more than overgrown towns, or groups of villages. This being the case it is natural that our conceptions of character should be based upon primitive conditions of society, which in our great municipalities no longer exist.

A city represents a system of reciprocal activities, duties, concessions, and benefits; the country in a primitive state is a place for independent, and, in the economic sense, non-social living. The essential idea of pioneer and rural life is isolation, independence, non-responsibility for others; that of the city is reciprocity, co-operation, mutual responsibility. Social co-operation in the city, with respect to health, comfort and prosperity, is a necessity; in the country the chief end is companionship. At the present time nearly a third of our population is concentrated in cities. New York and its environment contains more people than were in the thirteen colonies at the close of the Revolution. Yet even in these vast centers of population the ideals of a primitive community still prevail; for the dominant ideal of character in this country is that of an essentially non-social individualism. The European ferment during the seventeenth and eighteenth centuries drove the strong, independent characters out of that continent into the wilderness of the New World. Here the essentially primitive conditions that prevailed for 250 years developed all the initial non-social instincts among the strongest members of a strong race. Glorious as have been the past results of this personal independence in the subduing of a continent and in the defense of the nation against foreign foes or internal dissensions, we find no orator to praise, no poet to sing the glories of this spirit when brought under the conditions of our modern urban life. The story of our city government is one of inefficiency, rapacity, and fraud.

These primitive ideals of character are found on every hand, even

in our oldest cities, and they are almost universal in rural districts. One may see the results of this conception under city conditions best, perhaps, when we consider the influx to cities from villages and rural communities. The newcomer to the city would preserve the privileges of the district from which he came—a yard, a stable, a rubbish heap, perhaps, a well. But if, on the other hand, he demands privileges, he is equally ready to grant them. He is content to allow one man to drink milk and another whisky, nor is he disturbed if one chooses to keep a cow, and the other a saloon. Should the water supply be foul, he seeks to protect himself individually by bringing water from a spring or by buying a filter. His neighbors may look out for themselves. Why should he trouble himself to prevent their drinking the microbes of typhoid fever or to protect them from other filth diseases? Primitive morality does what it can in charity from pure pity for the individual beggar, but it acknowledges no responsibility for changing the conditions that produce beggary. It is the lack of civic morality that allows political and corporate rapacity to fasten themselves upon the city. When it is proposed to have the municipality undertake some important work of improvement costing a million dollars, the non-social citizen is horrified at the taxes involved, and promptly votes against the proposition. But he constantly allows a corporation having the capital to make the investment and then to bleed the city for half a century. When boodlers gain control of the city machinery for purposes of extravagance and fraud, though he may grieve at the wreck of public business he never thinks of making it his own.

The same non-social spirit that permits offensive sights, sounds, and smells, saloons and slums, unsanitary conditions, poor illumination and transportation, and slovenly or corrupt public service in general, also allows hordes of children to roam the streets untouched by the refining influences of the school. An effective system of compulsory education that would enable us to assimilate rapidly and easily the ever-growing tide of foreign life cast upon our shores is impossible, because it clashes with the non-social instincts of personal independence. The inevitable result of primitive instincts when placed in the city environment is public discomfort, the presence of infectious diseases, political corruption and corporate exaction, together with ignorance and hopeless poverty and degradation for a large part of the community. It is to the city schools that we must look chiefly for the development of what may be called civic patriotism. Primitive, non-social instincts must be supplemented by social or civic instincts. We now put much emphasis upon the development of national patriotism. But is the chief lack here? Is not the integrity of the nation

safe? Do not the unintelligent as well as the intelligent respond to the call of country? Did not the poor white of the south and the ignorant foreigner of the north fight shoulder to shoulder with the best men of their respective armies during our late war? Where was there ever more undaunted courage and fidelity on either side than in the Russian assaults upon the Turks at Plevna? We need now to put the emphasis upon civic rather than upon national patriotism. The latter in its non-social form is an inextinguishable instinct even of primitive peoples, but the former is the last and best product of civilization. A bare suggestion of war in this country can set the land ablaze with military ardor, but who can arouse a corresponding enthusiasm in the civic warfare against corruption, inefficiency, ignorance, and compulsory poverty?

An illustration of what is meant by the social as contrasted with the non-social instincts is seen in the transformation wrought in the city of Birmingham by Mr. Chamberlain and his colleagues.

When Mr. Chamberlain became mayor in 1874 he found a city having no parks, no public libraries or museums, no free schools, no public baths or wash-houses. Its streets were wretchedly paved and abounding in filth. The street lighting was poor in quality but high in price; the water supply was inadequate and of poor quality; the sewers were wretched and the death-rate thirty in the thousand. Worst of all, a large part of the city was given up to slums of the worst sort, where disease, wretchedness, immorality, and crime went on almost unchecked. Through the influence of the social spirit invoked by this man this condition of things has been wholly changed. The city has now ten public parks; it has free schools, free public libraries and museums of art, and public baths. The city furnishes the illumination for the streets, which is now plentiful and inexpensive. It erected adequate water works, paved the streets, put in an efficient system of sewerage, and reduced the death-rate by a third. It condemned and bought up the slum district, demolished the old buildings, and rented their sites to responsible persons for the erection of buildings of such character as to render slums forever impossible. At the end of seventy-five years all the property so developed falls to the ownership of the city itself. All these things were done without raising the tax rates, and in such a manner that the greatest expenditures will, in the course of time, pay for themselves. Moreover, it is said that at the end of the seventy-five years Birmingham will be the richest city of its size in the world.

So long as our present non-social ideals of character prevail, first in the school and later in the community, so long will our municipal reforms prove to be both ineffective and transient. They are brought

about through infinite labor of the few, only at the next election to relapse into the former state. The form of scientific temperance teaching has now become almost universal, yet it is largely ineffective because back of it, and largely annulling all its efforts, stands the non-social spirit of our people. We shall not get to the bottom of this or any other reform until the schools consciously go to work to supplement our excessive individualism by the insights and instincts of the social disposition.

While on the one hand it cannot be expected that formal teaching or isolated knowledge will do anything to implant these new ideals, made imperative by new conditions of life, liberty, and prosperity, so on the other hand little is to be expected from an artificial concentration of knowledge that does nothing to awaken mankind to the social attitude of mind, in which alone progress in that which enriches life is possible.

The three essential things, then, are vital knowledge, rational correlation and new conceptions of character. As in the cities there is the greatest need for these new ideals, so in the cities are to be found the best opportunities for realizing them.

DISCUSSION.

DR. B. A. HINSDALE.—The lines of battle are drawn here this morning much as they have been drawn on previous fields of discussion. It is contended on the one hand that the proper point of view from which to survey the child's education is that of the available culture-material. It is insisted on the other hand that such point is the nature of the child. Participants in the discussion emphasize respectively environment and psychology. "The course of study is of prime importance," some say; "Psychological analysis of the child mind is what we want," others reply. I cannot think the issue is so sharp or so important as the contestants appear to think.

Education is the growth, expansion, or development of the mind through its own activity. Hence the mind is a fundamental fact to be considered. But the mind acts, and so grows, only when brought into relation with objects capable of stimulating it to activity, and so to growth. Hence objects of knowledge—what we may call culture-material or education-stuff—is also a fundamental fact in education. The process that we call education may therefore be examined on either side, viz., the nature to be educated and the material or stuff to be used in educating it. There is an adaptation of the external world to the nature and needs of the mind; there is an equal adaptation of the human development, or of civilization, to the same nature and needs. To deny this last proposition is to deny that the civilizations of the foremost nations are psychological; it is rather to affirm that they are not genuine manifestations of man's nature, but are parasitic growths. Hence the two points of view are correlatives, and to omit either one is to commit a mistake. Nearly the whole field, if not all of it, can be seen

from either point of observation. If Dr. Harris and Dr. De Garmo were to sit down at a table to draw up a course of study they would not materially disagree, save, perhaps, in the reasons that they might assign for their respective recommendations. For instance, Dr. Harris would urge the study of geography because it is forced upon the child by his environment; Dr. De Garmo would urge its study because it is adapted to the development of his mind. Neither one, I feel sure, would wish to deny the validity of the other's reason. Accordingly, I appear on the field in an irenical spirit, and plead not for a compromise but for a broader view.

ISOLATION AND UNIFICATION AS BASES OF STUDY.

BY EMERSON E. WHITE, LL.D., COLUMBUS, OHIO.

An important condition in the development of any science is the use of clearly defined terms to denote its facts and principles. This is strikingly illustrated in the development of the natural and physical sciences. The terminology of chemistry, physics, and biology has made these sciences possible. It is difficult to see how they could be presented in a language without the use of definite technical terms, not only to denote phenomena, but principles and laws. Most of the terms in the present science of electricity lie outside of the vocabulary of the general scholar, and are known only to specialists in the science. The same is true, to a greater or less degree, of all the modern trades, professions, and arts. Each has a large glossary of technical terms peculiar to itself, each term having a definite meaning.

It is one of the recognized infelicities of the science of psychology that so many of its terms are in general literature, where they are used with varying and often diverse significations.

Indeed, one of the first conditions of the intelligent reading of a work on psychology is the determining of the definite meaning of the terms used by the author — not always an easy task. No psychologist who uses important terms in different senses, or with the meaning obscure, can be a successful author. This is specially true in that branch of psychology known as moral science or ethics. Much of the inconclusive and fruitless discussion which besets the student of ethics is due to the fact that the disputants use terms in different senses. A common source of disagreement is the use of words by one party with a larger or smaller content than the other, and this is true even when these contents contain a considerable common element.

We thus approach one of the serious obstacles in the development of a science of pedagogy. Its terminology presents a most striking contrast to that of the physical sciences. Many of its terms are

borrowed from psychology and ethics, not a few from philosophy, and these from authors who use the same terms in different senses. Indeed, the science of pedagogy has a very small vocabulary of technical terms which are used by all writers with the same meaning. This fact is the source of wide confusion in thought and much fruitless discussion. It must be evident to every careful observer that the movement in recent pedagogical inquiry is the reverse of the movement in other modern sciences. Instead of careful differentiation and the use of special terms to denote things that differ, there is in pedagogy much ambitious generalization and the use of terms that express indefinite and vague entities—terms that have been appropriately called “blanket words,” since they so readily cover a group of diverse ideas. I frankly confess that I read articles and listen to addresses on pedagogy that baffle my understanding, not, as I flatter myself, because they are too deep for me, but because of their vagueness and obscurity. Much of the present conflict of opinion in pedagogy is largely due to the fact that those who differ do not understand each other, and it is doubtful if each one always understands himself.

We have an instructive example of this difficulty in the discussion of the past year over the place and value of “correlation,” “co-ordination” and “concentration” in school instruction. The discussion has been a Babel confusion of ideas, if not of tongues, and well-meant attempts to settle the pedagogical meaning of these terms have only added to the confusion. After all that has been said, several writers for the educational journals are using the incongruous terms co-ordination and concentration as synonymous. One of the surprises of the profession was the expressed expectation that a recent report on the “correlation of studies” would be devoted to a discussion of the theory of concentration.

The desire to be understood in the present paper has led me to avoid, as far as possible, these badly mixed up terms, and to use, instead, terms that are more definite and fundamental. For this purpose I have selected the terms “isolation” and “unification” as denoting opposite processes and results.

The term isolation, as used herein, denotes the separation of a branch of study from other branches for the purpose of instruction—the teaching of it in separate exercises. I do not use the term in the sense of exclusion. The isolation of a branch of knowledge in instruction does not involve the exclusion of all the facts and skill that may have their origin in other branches. For example, the isolation of arithmetic as a school exercise does not mean that the data for its problems may not be taken from another branch of study. It simply means the making of instruction and drill in number the central and

controlling end of the exercise, the unit of activity. The same is true of isolation as applied to the other branches of the course.

The term unification is used in a contrary sense. The unification of two or more branches of study means their union in instruction in such manner as makes them one branch, with a common sequence of facts, and taught with a common end or purpose. The term is not limited to any particular mode of uniting the several subjects. For our present purpose it makes no difference whether they are united as co-ordinate elements, or whether one is made the principal or core and the others subordinated to it, as we construct complex sentences.

The term unification is, however, exclusive of isolation. It does not include the teaching of branches in separate exercises, however skillfully these exercises are related to each other. If two branches are taught in separate exercises, each having its appropriate and special development, they are not unified in any true pedagogical sense. For the purposes of instruction they are isolated. Nor is this fact of isolation changed if the several separate exercises all center in the pupil, and actually contribute to one teaching result. All rational instruction necessarily centers in the pupil, and in this respect methods do not essentially differ. The essential fact in complete unification is the unity of the subjects or branches in actual instruction—their oneness in the teaching process.

This leads to the natural division of the studies of a school course into co-ordinate groups or unities. Fortunately this subject has been too ably and too exhaustively discussed in this presence to require further elucidation. The only question is, whether there are more or less than five co-ordinate groups of studies. Dr. Harris admits that there is a sixth co-ordinate group of knowledge—the one that includes religious truth—the fifth in Dr. Thomas Hill's "hierarchy of studies"—and Dr. De Garmo's earnest plea for the recognition of three co-ordinate groups, the third being called the "economic," necessitates, if conceded, the adding of a seventh co-ordinate group—a group that includes drawing, construction, bookkeeping, etc., and better designated as the *industrial art* group. Whether these two additional co-ordinate groups be, or be not recognized as belonging to the school course does not concern our present purpose. The important fact is that, while these co-ordinate groups, whether five or seven, have certain interrelations, they have a certain origin, a different law of sequence, and, as a consequence, a different development; and it follows that no one of these co-ordinate groups can be united with another co-ordinate group by making the one or the other subordinate. *Co-ordinate entities cannot be unified on the principle of subordination.* This is a fact of prime importance in pedagogy. If the existence of co-or-

dinate groups of studies be once conceded, the Ziller theory of concentration is left in the air, since this involves *subordination*.

It is also plain that in discussing the question of unification a clear distinction must be made between the unifying of allied subjects in the *same* group and the unifying of subjects that belong in *different* co-ordinate groups. A failure to observe this distinction is resulting in much confusion. There is necessarily a close relation between subjects in the same natural group, and their union at different points in instruction may, as a consequence, be both feasible and desirable. But the unifying of co-ordinate branches is a different matter. Take, for example, the several subjects that make up the mathematical group. Whether arithmetic, algebra, and geometry shall be taught tandem, or the elements of algebra and concrete geometry run abreast of arithmetic in the latter part of the arithmetical course, is a pedagogical question that can be best settled by experience. This is simply the proper correlation of allied subjects *within a group*. But the harnessing of mathematics to history or to natural science is another procedure. It constitutes a team of pedagogic animals that do not naturally travel the same road or in the same direction.

The unifying of allied subjects within a group and the unification of separate co-ordinate groups are very different pedagogic problems. The distinction has a parallel in the difference of the powers of the signs $+$ and $-$ and the signs \times and \div in algebra, the former denoting relations *between* terms and the latter the relations of numbers *within* a term. It is important to keep this distinction in mind, for it is easy to pick out facts, and even groups of facts, in allied subjects which are so closely related that they may be taught together with obvious advantage, and then cite these instances as evidence that unification is a universal principle of teaching.

It should also be kept in mind that the unifying of closely related facts or groups of facts selected from separate branches is not the unification of the branches *as wholes*. A teacher may, for example, use the transparency of glass to illustrate the meaning of a lucid style in writing, but this would hardly be the unification of physics and rhetoric. The pedagogic purpose is not to teach the transparency of glass. The same is true when the skill acquired in one branch is used as an aid in teaching another. Thus, skill in drawing may be utilized in teaching geography, but this is not, in any true sense, the unification of drawing and geography; and, whenever it may be desirable to call such a procedure unification, care should be taken not to broaden the meaning to a unifying of the branches of study.

We are now prepared to ask whether isolation or unification can be made the basis of a course of study. It may be helpful in this inquiry

to note that each of these principles may have three quite distinct degrees of application, as shown on page 321.

It is here seen that isolation is considered *complete* when it applies to each branch of instruction, whether the end be knowledge or skill, and to each branch from the beginning to the end of the course. It seems unnecessary to add that this degree of isolation is not found in the American school. Spelling and reading were united more or less closely long before I was a pupil, and the same has long been true of the elements in other allied branches. Complete isolation is neither practicable or desirable.

The second degree of isolation more nearly represents the practice of the modern school. The co-ordinate groups of studies are isolated in instruction, except in the lowest grades, and the well-defined branches in each group are taught, as a rule, in separate exercises. There is, however, an increasing blending of the school arts, especially in primary grades, the arts of reading, spelling, writing, and language having many close relations and possibly interunions. Advantage is also taken of the natural relations between allied subjects, and there is much incidental blending of these subjects in actual instruction. But in many schools unification is not intelligently sought as an end. What is done in this direction is incidental, and only the more simple associations are attempted. Isolation is the dominant principle, unification being incidental and exceptional.

The third degree of isolation will be best explained in connection with the same degree of unification.

Complete unification is the blending of all subjects and branches of study into one whole and the teaching of the same in successive sections. When this union is effected by making one group or branch of study in the course the center or core and subordinating all other subjects to it, the process is properly called the concentration of studies. In such a unification of subjects the principle of sequence and development of the central or core study necessarily dominates the entire group, and the proper development of each subordinate study is sacrificed. Nor is this result avoided by making the child the center, whatever this may mean, since this ignores the principle of development *in all branches*. Complete unification of school studies is neither practicable or desirable.

In the second degree of unification all branches and subjects are united in two or three co-ordinate groups, each with a central core. It recognizes co-ordination as a true and fundamental principle in a course of school studies; and it allows each co-ordinate group to have its own principle of development, contenting itself with those natural and simple associations which are easily established between

ISOLATION.			UNIFICATION.		
THREE DEGREES.			THREE DEGREES.		
First Degree. COMPLETE. All branches taught separately throughout the course.	Second Degree. GENERAL ISOLATION, with incidental blendings; especially in <i>Primary Instruction,</i> including the language arts.	Third Degree. CO-ORDINATE BRANCHES, for development and drill; with rational blendings of <i>Allied Subjects</i> when relations are close and helpful; especially in <i>Elementary Instruction.</i>	Third Degree. ALLIED SUBJECTS, at points of close relation, especially in <i>Elementary Instruction;</i> with isolation of all <i>Co-ordinate Branches</i> for special development and drill.	Second Degree. GROUPS. All branches united in two or three <i>Co-ordinate Groups,</i> each with a <i>Central Core.</i> Incidental isolation of branches for special development and drill.	First Degree. COMPLETE. All branches united in one <i>Organic Whole.</i> with a <i>Central Core.</i>

subjects in the same group. It also permits the isolation of the co-ordinate branches in actual instruction, and their systematic treatment. All this means much, for, if the principle of isolation applies to co-ordinate groups *because they are co-ordinate*, it necessarily applies to *all* the co-ordinate groups in a course, *whatever be the number of such groups*.

If the attempt to subordinate mathematics to literature or history leads to fantastic results, as is conceded, the same will be true of an attempt to subordinate either physical or biological science to the so-called culture studies. Hence the argument for two or for three co-ordinate groups, each with its own sequence and development, concedes the whole ground; and we thus again reach the fact that no two co-ordinate branches of study can be wisely unified by making one subordinate to the other. *Co-ordination excludes subordination*.

A glance at the outline given above will suffice to show that the third degree of unification and the third degree of isolation are practically the same. They differ chiefly in emphasis, one putting the emphasis on unification and the other on isolation. Both agree in the unification of allied subjects and closely related facts, and both require the isolation of co-ordinate branches for development and drill. Neither proposes to subject one branch of study to the principle of development that belongs to another, but each branch and subject is to receive such separate treatment as its nature demands. Both agree that unification is most feasible in elementary instruction, where the association of facts is simple and easy.

It is obvious from this survey that the application of the principle of unification falls largely *within the details of actual instruction*. If closely related facts in different branches are to be united in instruction, it must be done by the living teacher; and hence the problem of unification belongs more to the art of instruction than to the curriculum of studies. The curriculum should, however, not only include the five co-ordinate groups of studies, but the sequence in each group should correspond with the psychical development and progress of the pupil. Since human knowledge is the result of human knowing, every branch of study has natural phases that correspond to the psychical phases through which pupils pass as they ascend in the course. A true course of study not only properly correlates the five co-ordinate groups of studies, but it cuts off a section of each in every round of its ascent. It thus adjusts, so far as this can be done in a scheme of studies, the exercises and disciplines of the school to the psychical condition and needs of the pupil. Studies are thus put in right interrelation by being put in right relations to the pupil. The child is, in this psychological sense, the center of the course of study.

These facts suggest the mischief that may lurk in an exaggerated view of the importance of unifying all the studies of a child. The attempt, for example, to associate every fact of nature with literature may give now and then a beautiful, even striking, lesson; but nine-tenths of the important facts of nature cannot be hitched to a poem. The attempt to establish such associations inevitably results in fantastic, and even ridiculous combinations. Nor can I see much promise in the effort to unify all branches of instruction by *universal relations*. There may be a "causal plexus" that binds all knowledge into an organic unity, but children are not philosophic spiders that gather knowledge by excursions over a web of philosophic causation.

It is seen from the foregoing survey of the subject that the principle of unification cannot be made the basis of a rational course of instruction—much less of a curriculum of school studies. Its most fruitful applications are in teaching allied subjects *within* the several co-ordinate groups, and here chiefly in teaching the elements. It also has an important place in teaching the more closely related facts in different co-ordinate groups, known facts in one group being used in teaching related facts in another group. Here is the recognized field for the practical application of the principle of unification, and such application promises valuable results.

But the obvious principle that underlies not only courses of study but methods of teaching is the fact that every co-ordinate branch of study has its own natural sequence and development, requiring its isolation and separate treatment. Instead of the concentration of all branches of study by subordinating all the rest to one central core, there must be increasing differentiation and isolation, with proper recognition, of course, of all important interrelations. It thus appears that isolation is the dominating principle in a true course of study, unification having its place and function chiefly in the processes of instruction.

One more observation seems a fitting conclusion to this study. It does not follow that facts taught separately remain isolated in the pupil's thought. The mind is endowed with the power of assimilation and unification, and this power is more fundamental in education than is dreamed of by some philosophers. Were the assimilation of knowledge or the unification of mental power dependent upon the philosophic mixing of the materials of instruction in the mind's hopper, I fear that most of us now present would be idiots. We have all been doing a little assimilating and unifying on our own account, and have actually been able to see some of the simpler relations between facts not learned in the same school exercise, or in the same day, or even in the same year. It may be true that few of us have seen many of the

"universal relations" which, according to the somewhat uncertain testimony of philosophy, bind all knowledge into one "organic unity," but we hope to get more of these insights, at least in the next world. Nor are we much comforted with the suggestion that a child can be made *to feel* the oneness of all knowledge, even though he may not intellectually apprehend it. The feeling of a truth not present in the mind seems to border on mystery. It is a wise child that sees the immediate relations between the more common facts of observation and experience.

DISCUSSION.

DR. CHARLES A. McMURRY, Normal, Ill.—Dr. White, in his conclusion gives isolation the dominant place in the course of study. I should be inclined to give isolation and unification an equal importance in the processes of selecting, arranging, and teaching the subjects of the school course.

The tendency heretofore has been very strong in the direction of isolating school studies. They have been artificially separated. There is a sequence in any subject like grammar or arithmetic that must be observed so as to bring the facts and principles into a scientific order. There is a positive advantage in setting a thing up distinctly so as to see it apart from others, but it is equally important to relate it afterwards to other things and to understand the relations. Analysis must always be followed by synthesis, isolation by unification; otherwise knowledge is broken into fragments and scattered. No important fact can be understood by itself. It must be seen in its relations to bring out its meaning. Minneapolis, for example, is not understood by stating its location on the upper Mississippi and the fact of its commerce. But call attention to the pineries of the North which send their millions of logs yearly down the Mississippi and its branches to Minneapolis to be changed into lumber and distributed to the grain regions of the West; notice also the wheat fields of the Northwest sending their millions of bushels of wheat to Minneapolis to be milled into flour and distributed to the East and to Europe and you begin to see in these relations to great producing regions, to rivers and railroads, the causes which have worked so swiftly to produce a great city.

Dr. White has chosen to ridicule the causal idea, and yet it is the root out of which grows much of the best interest and insight into studies.

The isolation, alone, of studies means the superficial mastery by the memory of the facts, while unification as worked out by a deeper correlation of ideas on the basis of similarity and causal connection is a deeper grasp of meanings.

In the past we have neglected to trace out causal relations and connections which give greater unity and value to the knowledge that the child acquires. It is better to make children thinkers than to make them simply memorizers. We separate and isolate studies. But it is true that a child, after thus setting things up and leaving them in this artificial isolation, goes from the school into the world and does n't recognize the things he has been studying; nor is he able to make a practical application and use of the knowledge he has acquired. In the books he finds the trees and plants all beautifully arranged and isolated from other things; so also with insects, stones, etc. Out in the woods he finds together

the trees and insects, the sunshine and birds, the grasses and stones, all in close and even vital life relationship of dependence and mutual support. Why not make school work and studies correspond to life?

DEAN F. M. MCMURRY, School of Pedagogy, Buffalo, N. Y.—I wish to put only one question to Dr. White. In his paper, just read, the conclusion reached is largely dependent upon his assertion that there is a necessary sequence in the arrangement of topics in each study. His thought evidently was that this sequence was so important or so necessary that each study sacrifices altogether too much by being associated with some one branch as a center. I, for my part, have never yet been able to discover the suggested necessary sequence in most of the common-school studies. I would like to ask Dr. White to show that there is such a sequence in geography, in nature study, and in literature. [Dr. White here replied, saying that any science presupposes a necessary arrangement of its subject-matter, and consequently there is this necessary sequence in the common-school subjects.] In showing that there is a necessary sequence in the studies, Dr. White has assumed that the studies taught in the common schools are taught as sciences. For instance, he seems to regard arithmetic, literature, geography, nature study, etc., each as a science. I take it that in this discussion we have in mind, primarily, the common-school curriculum. I doubt very seriously whether any one of the common-school subjects should be taught as a science. If I am right in this view then the argument of Dr. White loses its basis. The necessary sequence remains unproved, and that being the case we are not at all sure that by subordinating some studies to others the former have much to lose.

ORGANIC RELATIONS OF STUDIES IN HUMAN DEVELOPMENT.

BY W. N. HAILMAN, WASHINGTON, D. C.

I. The complexity of man, as the highest product of evolution, and therefore embodying the whole evolutionary history, renders the task of determining these relations exceedingly difficult. This difficulty is still further increased by the fact that in man the "everlasting will" has become individualized, and is attaining freedom as a final cause in shaping the life of the individual. Nevertheless, in a large way, these very difficulties indicate quite clearly the ultimate criteria that should guide educational work in the selection and use of its materials and measures. The liberation of the individual will is the aim of all educational work. This implies as the ultimate aim of human learning the knowledge of man in his origin, his evolutionary history, his relations to environment, his essential constitution, his destiny.

In heredity man is established; in education he becomes free. In heredity the will preserves its achievements by the mere force of inertia and increases them in the steady gropings of natural selection;

education lifts the will out of the shadows of hereditary instinct into the broad day of insight, of free aspiration, of deliberate co-ordination with recognized law. Through education the selfish centripetal coils of mere self-preservation are taught to merge into generous centrifugal spirals of self-expansion; whatever in man has been narrowly individual becomes broadly universal; static indolence is spurred into dynamic striving; the evanescent pleasures of eager interests are replaced by the deeper and more permanent joys that bless a life of love and freely followed duty.

The inmost essential of the child—that by which man ceases to be a mere animal; that by which he frees himself from heredity and becomes amenable to education; that through which are opened to him the portals of humanity, with its infinite possibilities—the inmost essential of the child is soul. To stimulate this into activity—or, rather, to afford it every opportunity for activity in efforts to lift itself out of the limitations of lingering instinct into the freedom of a purposeful will—this should be the constant aim of every educational act or measure. This is the first and foremost law of educational method. The “laws of self-activity”—of “stimulation for self-activity”—are but other formulas for this requirement, that every educational measure should tend to establish the conscious self-mastership of the soul.

Three phases are involved in self-activity—the stimulus which, entering consciousness and the memory, results in knowledge; the attitude assumed by the mind towards this mental income, resulting in more or less definite purpose; and the steadfast outward following of such purpose resulting in achievement. In a narrower sense, the first of these phases is termed the head or intellect; the second, the heart; the third, the will in action, or the hand. The active unity of these three constitutes harmonious life. It is clearly not desirable, more particularly during the earlier educational periods, to separate these three in distinct efforts at independent intellectual, moral, and manual or physical training. To do this would tend to impair the integrity of the mental act which begins in experience, is established in thought, and bears fruit in action or life-conduct. As through these senses the world rushes inward to meet the instinctively eager mind-heart of man, awakening it to consciousness of life and self, so through the hand does this same mind-heart project itself outward as a determining, and ultimately the determining, factor in life.

At no time should the educator forget the essential unity of these three phases in the soul-life of man. Every new knowledge should stimulate new deeds. All better knowing should result directly and unavoidably in better doing. Conversely, every new achievement

should rest on increasingly clear intellectual apprehension; all outward life should be based on increasingly distinct insight.

This is by no means vitiated by sociological requirements of division of labor or interest, of specialization of effort, and of massing individual forces. It is perfectly legitimate under this law of harmony that under certain conditions of social life the formulation of knowledge, the crystallization of purpose, and the achievement of purpose should be assigned to different individuals, or groups of individuals, provided only that all be in conscious harmony as to the essential oneness of their work. In fact, education should take cognizance of these sociological necessities, and should stimulate in its work such specialization and division of labor and massing of individuals in common enterprise.

Much has been said of the need and value of apperception in intellectual development, a phase in the process of mental assimilation in which the mind, on the basis of former gains, assigns to new experiences their proper place in its treasure-house of living knowledge, and, emphasizing in growing distinctness resemblances and differences, arrives at increasingly clearer, more definite, and more abstract conceptions of things and relations. These apperceptual results, however, are very superficial and flimsy affairs unless they become rooted in the heart-life of purpose and find fruitage in living achievement. In order to become permanently valuable possessions they need to be intensified in another deeper phase in the process of mental assimilation, a phase for which I feel tempted to propose the name of introception. In this phase of assimilation, the new experience, after having in apperception assumed its proper place in the light of previous acquisitions, becomes an integral factor in the self-expansive, outward life of the mind-heart of man, by which this mind-heart lifts itself out of mere seeing and doing into universal insight and creative self-assertion, which are both the crown and essence of harmonious life.

Yet these two laws alone—the law of self-activity and the law of harmony—might lead men astray unless there live in every purpose the divine spark of benevolence or love. Indeed, it is possible to develop strong, self-active, individual character, possessing much clear knowledge of things and relations which it utilizes in the service of an energetic and intensely fruitful and subjectively harmonious life, yet devoid of love, immorally serving self at the expense of higher and wider life, or unmorally gratifying pleasure, keeping out of harm's way, turning life back into channels of mere self-preservation or perverting self-expansion into greedy self-accumulation, never reaching the blessed fields of self-devotion. Out of this gehenna of hopeless

egoism, only the divine spark of love can save man; a love that teaches him in altruistic fervor to love his neighbor as himself, and that lifts him, subsequently, to a degree of insight which kindles in his soul devotion to the ideals of humanity. Thus by love is man lifted out of the egoistic life attitude, in which, as Fröbel would say, he is essentially the child of nature, through the altruistic attitude, in which he is the child of man, into the humanitarian attitude, in which he is crowned the child of God.

These three — self-activity, harmony, benevolence — constitute the three primary laws of method; or, rather, the three phases of the one law of method which requires that every full educational measure should stimulate into self-active life the entire being in harmony with benevolent purpose.

This law guards us against all manner of one-sidedness, fragmentariness, artificialness, and other sterilities. It guards us alike against the vanities of erudition and the arrogances of empiricism. It bases every educational advance on the pupil's widening and deepening experience, which it leads steadily to deeper thought, better purpose, and higher achievement. It gives to experience the drift towards thought, and to thought the thirst of knowledge which is but clearer experience. It teaches thought to seek achievement, and urges achievement to press for keener thought. It imparts to the whole being the fervor of creative effort, and sanctifies this at every step with never failing good will.

Moreover, this law, which is based upon the essential unity of man in his varied life utterances, adapts itself readily to parallel unities among the various phases of human learning. A glance at a few of these unities will illustrate this.

II. It seems to be universally conceded that the ultimate object of human learning, as such, is the knowledge of man in his origin, his history, his relations to environment, his essential constitution, his destiny. With reference to this all else is vestibule or avenue, material or implement. Biology, psychology, history, sociology, philology, and possibly the metaphysical sciences, on the one hand, as well as mathematics, physics, chemistry, geography, and astronomy on the other hand, owe their value and dignity to the light they throw upon the life of man and humanity, or to the control they give him over his physical environment for the purpose of his enlarging life. It will be noticed in these series that each lower serves to explain its higher, and finds its justification in this fact. Thus, mathematics has no value in itself, but assumes high dignity as the key that unlocks physics and, through physics, chemistry, and the rest. Similarly would biology fall into contempt as an idle amusement were it not that

it furnishes data for the succeeding sciences, and represents the indispensable first step in ascending to a worthy knowledge of man and humanity.

This relation among the sciences is so pronounced that to many each science appears in the light of an art with reference to the sciences that follow in the scale.

This will become transparently clear when in the series we substitute for the names of the sciences the names of the things and relations with which they deal. In such a series we find mathematics, physics, and chemistry, dealing successively with considerations of number, form, force, and motion, both molar and molecular, and the remaining sciences busy with life, its environment, kinships, and aspirations. Taking this series at any point, it is manifest that each consideration leans for the light of analysis upon its predecessor, and owes its value to the analytic light it throws upon or transmits to following considerations.

Thus in the analysis of form, number considerations mark every step of the road; and in the related arts of measurement and drawing considerations of form are, indeed, in the lead, but would yield little result without the definiteness and precision which are brought within our reach through knowledge and control of the involved number relations. The laws of matter and motion must remain forever a mystery, but for the solvent powers of number and form knowledge when applied to chemical and physical phenomena and to the intricate analyses of dynamics; and here again, in the applications of these laws to the concerns of practical life, considerations of number and form alone can secure safe guidance in the technical manipulations and arts that deal with laws of matter and energy.

Similarly life—at least, in its physical and physiological aspects which relate to the conditions and tools of life—is explained in the light of established laws of matter and energy; and so well and thoroughly is this accomplished that many thoughtful students fancied they might explain on the same ground even the psychic side of life, denying the possibility of self-active effort, which is the soul of life. On the other hand, intimate knowledge of individual life and its conditioning environment is indispensable in our attempts to understand the kinships of life, both sociological and historical; and these, in their turn, throw floods of light upon the substance and meaning even of man's highest aspirations in art, philosophy, and religion.

III. In applying these relations among the various branches of human learning to problems concerning the development of the child through education, as sketched in the first part of this inquiry, we are struck at the outset with the fact that as the child in his develop-

ment—individual and sociological—gradually passes from simplest to increasing complex conditions, interests, and activities, so also in the hierarchies of human learning do we proceed from the simplest of sciences, arithmetic, through increasingly complex intermediaries to sociology, the most involved of sciences. We are, therefore, justified to look in this parallelism for hints to guide us in determining the order in which subjects of instruction shall come to the child as special objects of interest, apart from the relations they may sustain to other subjects of the instruction or the share they may have in life or in human learning as a whole.

However, before entering upon more detailed considerations of this and other related practical problems, it is desirable that we should fully appreciate the differences between what are termed the developing and the didactic methods of instruction and the places they hold in the work of the school. For this purpose it is not necessary to go through an elaborate analysis of the two methods of work. I content myself, therefore, with enumerating the chief points of contrast between them.

Didactic instruction in its methods is primarily and predominantly synthetic and deductive. It begins with general statements, definitions, axioms, principles, established systems. Developing instruction, on the other hand, is primarily and predominantly analytic. It begins with particular things, phenomena, and relations, and reaches by processes of induction, the definitions, axioms, principles and systems on which didactic instruction rests. Didactic methods are dogmatic, dialectic, static; transmitting the recorded knowledge of the race and the conventions of institutional life. Developing methods are heuristic, socratic, dynamic; finding and sifting knowledge, establishing attitude. Didactic instruction fills the memory; its pupil is predominantly receptive and imitative; the stress is on the subject of instruction. Developing instruction stimulates self-activity; its pupil is predominantly self-assertive and creative; the stress is on his environment and experience with reference to the subject in hand and on his control of these in life. It does almost without saying, therefore, that these two methods of instruction, far from being antagonistic, are supplementary of each other. Didactic instruction begins where developing instruction ends, and in its turn didactic instruction furnishes the true basis for further development, adding to the experience of the individual that of the race, lifting him out of local into universal environment, out of social into sociological life, out of empiricism into science, out of interest into aspiration. On the other hand, developing instruction supplies the pupil with living points of apperception for the vital assimilation of didactic income; gives him the habit of self-

actively testing and verifying this income in practical application, as well as the attitude of placing his self-assertive and creative life into vital harmony with the life of the race.

Without the vitalizing influence of mental habits and attitudes which only developing methods can establish, didactic instruction fails of its purpose, transmits only the forms and husks of knowledge, oppresses and arrests life by the sheer weight of these, leaves man stranded upon the shoals of mere erudition. Without the wealth of data and breadth of outlook which can be derived only from didactic instruction, development is liable to go astray, to be starved into self-conceit or wrecked on the reefs and bars of a narrow and wasteful empiricism.

For fullest life, for the fullest realization of the purpose of education, which is the liberation of man's individual will into universal freedom, the deliberate, organic, co-operation of both methods is necessary. For this reason it would be preferable, instead of speaking of two methods, to speak rather of two phases of one and the same rational, progressive, or organic method, whose purpose is to enable succeeding generations to co-ordinate themselves self-actively with the continuously progressive development of the race.

Even in the nursery the educational instinct of the mother prompts her alternately to stimulate her child's self-active development by more or less suggestive adjustments of environment, and then to guide his conduct, to enrich his interests, or to hasten his vague inductions by example or precept, by descriptive or narrative snatches of story or reminiscence, and by other more or less didactic devices. Still more pronounced is this in the kindergarten and further on, in the elementary school. All of this implies more or less didactic modes of procedure, entered upon with a view, however, of intensifying development, expanding the child's horizon, deepening his interests, ennobling his purposes, or enhancing his powers of achievement.

Indeed, we should never lose sight of the fact that all didactic devices—so far as the nursery, the kindergarten, the primary school, and even the grammar school are concerned—are strictly in the service of development, and that they owe their value exclusively to this fact. Moreover, in the case of these educational factors this development is primarily and predominantly individual and social, although with a growing tendency toward universal and sociological phases. It is firmly rooted in the child's personal experience and environment, yet steadily growing toward the freedom of science and art. It relies largely for spontaneous fervor on the pupil's interests, which, however, as steadily expand into the freedom of aspiration.

Later on, in high school and college, these tendencies begin to

assert themselves more and more clearly as the dominant factors in development. The student now should learn more and more consciously and deliberately to base individual and social efficiency upon sociological requirements and universal law, to control experience and environment in the light of the achievements of science and art, and to place his life under the direction of an enlightened, liberated will.

IV. In entering, now, upon a more detailed consideration of the practical problems involving the relation of the various branches of human learning to child development, we may, therefore, at the outset, profitably distinguish between the two great periods of instruction in which the developing and didactic methods successively predominate, and which we may designate, respectively, as the elementary and scientific periods of instruction. Waiving the nursery, the first of these embraces the kindergarten, and, approximately, the first six years of school life; the second embraces the last two years of the grammar school, the high school and college.

During the period of elementary instruction the child should deal mainly and preferably with things and relations in close proximity to him or clearly related to his immediate environment. He will, therefore, approach his subjects from the side of the things with which they have to do, rather than from the side of the abstractions that underlie their scientific aspects. He will deal with number, form, matter, and motion; with life, its environment and kinships; with language, literature, and song, rather than with arithmetic, geometry, physical and chemical science, biology, grammar, rhetoric, and music. Moreover, he will approach these things rather from the developing than from the didactic side; his activities will be analytic and inductive, rather than synthetic and deductive.

He will not, therefore, at first be interested in number, form, matter, and motion, as such, and apart from the living things and objects of nature and art that may have enlisted his sympathy, stimulated his interest and purposes, and aided him in the play-work of his life. Yet it is desirable that he should be brought with reasonable speed to feel an active interest in certain fundamental abstractions in relation to number and form; at least, so that that he may be enabled to place himself in full possession of these keys to knowledge, to synthetic skill, and creative efficiency.

The kindergarten appreciating these considerations, brings the child, therefore, from the start into vital intercourse in social games with other children, because these appeal most keenly to his sympathies and stir into activity his inmost soul. Through these, it interests the child in objects of nature and art, and in the living things in his environment which are concerned in these games. At the same time,

with the help of material playthings which emphasize in their construction fundamental relations of form and number, it enables the child to give expression to his ideas and to achieve his purposes in a half-material, half-pictorial symbolism, which stimulates in his mind a vital interest in these fundamental relations, and leads him to make them direct objects of his concern.

The kindergarten places the child at once amid the rich, all-sided stimulants of full social life. From this it excludes, indeed, all that might repel or shock the child, or confuse it and lead it astray; but it provides for every essential of social tendency. It adapts every condition to the feeble self-activities of the child, that they may be fully stimulated but not strained, and is solicitous to establish ready mutual responsiveness between the child and its environment. It takes special care to give prominence in this environment to the things and activities of life, inviting the child to respect and nurture life, and to relate himself in good will to the interests and purposes of the symbolic human world of the kindergarten of which he is a part. At the same time the kindergarten provides, as material for the child's groping, yet eager efforts to analyze the environment, simple playthings which invite the embryo student's attention steadily and definitely to number and form relations in all that challenges his interest. Thus, on the one hand, the kindergarten holds the child's being fast in the most complex and spiritual interests of humanity, leading his life gently but surely toward free, intelligent co-ordination in benevolence with these interests. On the other hand it enables him to reach speedily and in adequate clearness the simple fundamental abstractions without which he can never hope to master the conditions and to control the environments upon which the prosperous unfolding of the spiritual side of man depends.

From the kindergarten the child passes into the primary school with his life interests intensified and strengthened; eager to learn, to love, and to do, to co-ordinate himself with a new world on a higher plane and with wider outlook—a world less symbolic and more specific, perhaps, yet clearly at one with the child's coming real world and nearer to it. The child is now ready to take a direct interest in number and form as such, still, however, from the analytic, inductive, experimental side, and with constant practical applications of his discoveries to concrete purposes in measuring, drawing, modeling, and other manual work, yet more and more prepared, as he advances, to appreciate the value of definitions, general statements, and classifications, and (more particularly in matters of form) quite able to formulate such approximate definitions and general truths on the basis of his own experience and thought. At the same time the

increasing complexity of his number exercises (I should prefer to call them number plays) renders the material symbolism of blocks and beads, as well as the pictorial symbolism of simple drawings quite cumbersome, and the child turns to the conventional symbolism of ciphers with the sense of relief that comes from increased freedom and added power.

The child has brought from the kindergarten an active sympathetic interest in the life of plants and animals, and is prepared to observe them more systematically, to care for them more intelligently, to record his observations, and to give intelligible accounts of his work and observations in drawing and coloring, as well as in the conventional symbolism of written characters. Naturally these observations will deal chiefly with considerations of form and color, with measurements of time and growth. This nature study, will, therefore, be in vital connection with number and form study, and will react favorably upon these interests. Much is to be gained at this period by the establishment of a school garden and by excursions into the surrounding country, not only for the further development of a reverent and sympathetic spirit in the study and nature of life, but also for the establishment of a vital basis for the broader and deeper consideration of the environments of life, which, in due time, will lead the child's thoughts toward physical geography and related branches as specific objects of study, as well as for the further unfolding of the child's social tendencies and his interests in the occupations and institutions of man, preparing him on the side of learning, for the specific study of historical and sociological subjects, and, on the side of life, for practical benevolence.

In the records and accounts of his work the pictorial symbolism of drawing and coloring very soon proves inadequate, and the child turns with instinctive gratitude to tactful efforts on the teacher's part to put him in possession of the conventional symbolism of the written characters. Writing follows closely the very sounds of plastic speech, and, like the latter, expresses with equal readiness the deepest generalizations of abstract thought and the minutest details of descriptive and creative fancy. Under thoughtful teaching the child appreciates this, so that a comparatively short time will be required to induce him to take a direct interest in exercises which are concerned exclusively with the development of skill in writing, reading and language.

Throughout this period the plastic material of the kindergarten enables the school, through synthetic applications of numbers and form elements in exercises akin to art, to touch the deepest springs of self-activity and benevolence in connection with every subject of instruction. These exercises, much strengthened of late by the intro-

duction of sloyd into the work of the school, afford the children, upon their own plane of development, rich opportunities for social, as well as individual efficiency, which designates the proximate aim of educational effort.

It will be noticed that during this period the differentiation of subjects in human learning and related arts has made much progress. The child has learned to take a direct interest in number, form, drawing, natural history, writing, reading and language. Other matters are still more or less intimately involved in the general interests of the child and connected with the applied work in the differentiated subjects enumerated above. Physical and chemical phenomena on the one hand, afford interesting material for the practical exercise of arithmetical and geometrical skill; on the other hand, they are closely connected with considerations of life environment in nature study. Similarly, considerations of geography and other matters of life environment, are still deeply involved in nature study, and in the anecdotes and readings which are meant to extend the child's horizon in these matters and to stimulate historic and scientific interest. Sociological subjects are still latent in the practical life of the child. Yet much can be done to lift them toward objective differentiation in games and plays, in the social co-ordination of school exercises, and in suitable talks and readings concerning the social environment of the child.

On the whole, the work during this period continues to be predominantly analytic and inductive, and concerned with the child's direct experience and immediate environment, yet with a decided leaning toward synthetic and deductive operations and frequent excursions into comparatively distant fields and relatively foreign environments, accessible to the child only with the help of imagination and the deeper apperceptive processes.

The transition from the primary to the grammar grades is significant. The child has reached the age of ten or eleven and is sufficiently well established in mental development and analytic experience to permit the school to place increasing stress upon didactic modes of procedure in instruction. He has had much practice in formulating successive results of inductive processes in approximate definitions and generalizations, so that in a number of subjects he can follow with pleasure and profit deductions from ultimate scientific statements. The organic connection of memory and the creative phases of self-activity are sufficiently assured to enable him to receive intelligently and to assimilate vitally the "recorded knowledge of the race" in more or less dogmatic and dialectic presentations by the teacher or the manuals.

The child may now approach subjects of instruction more and more definitely from their scientific side. He is prepared to study arithmetic and geometry instead of number and form; grammar instead of language; botany, zoölogy, geography, and, later on, physiology, instead of life and life environments. In some of the arts such as music, drawing, and writing, systematic instruction, based on ultimate, technical principles and in synthetic, progressive sequences, is now fully in place.

On the other hand, sociological and psychological subjects remain throughout this period in the elementary stages. The child is, indeed, prepared to interpret and to appreciate the import of myths and historical accounts, to take an intelligent interest in the economic pursuits of men, and in particular phases of institutional life, to analyze motives of action and ethical impulse; but the scientific study of these things is still beyond the grasp of self-active effort on his part.

For similar reasons the specific consideration of physical and chemical sciences should be postponed for a later period. The child, however, is competent to follow and make experiments bearing on these subjects, to describe these and to analyze them, to arrive by inductive processes at certain proximate general statements, and to apply these in solution of practical problems that appeal to his inventive genius, or to make use of them in efforts to explain contrivances and processes in the mechanic and industrial arts. The manufacture and arrangement of apparatus for these purposes afford much opportunity for utilizing the child's gains from whatever manual training the school may afford.

Manual training, however, should during this period still be closely and directly connected with the general development of the child, rather than form a distinct subject of instruction. The chief object of workshop and laboratory should be to afford opportunity for analytic work for the solution of practical problems connected with the work of the school and in which the hand plays an important part. The child should gain dexterity in the use of tools and material much in the manner in which he attains agility and strength in games and play. For this the way is indicated in sloyd as originally taught by Clauson, Kaas, and Cygnaeus. It can be achieved by the application to wider interests and greater scope of the principles that guided Froebel in kindergarten work, and which have since been successfully extended to the manual work of the primary school. The manual work of the kindergarten and primary school gave to the child self-confidence through the use of material of ready plasticity, and the results of the child's work derived their value chiefly from their symbolic significance with reference to work and achievement. In the grammar

school material is to be selected more and more with reference to the practical purpose which the finished product is to serve in actual outward life. In the primary schools only the simplest tools were used, and these chiefly in order to secure neatness and accuracy; in the grammar school the use of tools in overcoming refractory material and in securing speedy work is of prime importance.

In its progress, however, the manual training of the grammar school continues to move steadily on the side of knowledge towards science, on the side of utility towards the industries, and on the side of creative self-expression towards art. At the same time it continues to be the main factor in developing the social sides of the child's being, enabling him to appreciate the value and necessity of adaptation, of division of labor, of unity of purpose in benevolent co-ordination, of the significance of institutional life.

Hitherto the child has dealt chiefly with his immediate environment, assimilating new experiences and achievements of his own with the apperceptual capital at his disposal. In the grammar school he learns to assimilate with his own experience the experience of others distant from him in time and space, and accessible to him only through avenues of mutual sympathy. His individual egoistic experience expands now distinctly into the altruistic experiences of his time and into the broad experience of the race; and he passes correspondingly from a more or less egoistic life-attitude through various altruistic phases of attitude to a truly humanitarian attitude which unites and sanctifies the two.

Having finished the grammar school course (at the age of fifteen or sixteen), the young people are now ready to take up some specific occupation suited to their conditions, tastes, and aptitudes, or to enter upon courses of further training in secondary or high schools, or in technical schools. Of these, only the secondary or high schools can claim our attention here.

Strictly, in so far as these institutions are concerned, the period of education, in the sense of a systematic effort on the part of elders to guide character development, is at an end. It is true, character development still goes on, and it is of the highest importance that environment and instruction, example and precept should lie toward the ideals that gave direction to the work of the elementary school. It is true, too, that the high school should consciously confirm the student in the humanitarian life attitude into which the grammar school has led his thoughts; and it is equally true that this process of self-expansion should be supplemented by a process of self-revelation which the high school has constant opportunities to stimulate, and which alone can assure intelligent, spontaneous devotion to duty on

the student's part. Yet, within these limitations, the chief concern of the high school is to furnish its students with an outfit of knowledge and skill which is indispensable to them in the pursuit of the special studies required for proficiency in the liberal arts or professions for which the college is to furnish special preparation.

It is needless, however, as well as inexpedient, in this sketch, to enter into details, further than to indicate that, at least in so far as the subjects of instruction are concerned, scientific treatment and didactic modes of procedure are in place throughout the entire range of work; that the specialist and the manual are not only justified but necessary; and that more or less independent research in any direction on the student's part is no longer practiced for the sake of developing power, but rather with a view of training him in skill to apply the rules of scientific or conventional methods of work, so that in due time he may become fitted for the freedom of the college, or to enter worthily the larger freedom of a rich, practical life, in full possession of the achievements of the race, in harmony with the best tendencies of its evolution and competent, as well as eager, to aid in its onward course.

*COURSES OF PEDAGOGICAL STUDY AS RELATED TO
PROFESSIONAL IMPROVEMENT IN A CORPS
OF CITY TEACHERS.*

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With respect to pedagogical knowledge a corps of city teachers may be divided into three classes: The informed the uninformed, and the misinformed. Even the class first named, which is too often the smallest of the three, has need of professional improvement. This need does not show that the teachers are morally culpable, for in America we are still in the beginning of teaching as a profession. There yet abounds faith in the hoary-headed heresy that the teacher is born, not made; and this faith causes many a school board to employ men and women without professional training, and to pay scholars rather than teachers for work mere scholars can not do. The superintendent of schools knows that the resultant of the correlated forces of a school system should be a well-equipped, efficient teacher in every class room, and without difficulty he decides that the highest function of his office is to help inferior teachers become good teachers, and good teachers become better teachers.

Of all the means which may be used by the superintendent in the improvement of teachers, that which promises the greatest percentage

of result, rich, sure, and permanent, is a skillfully directed, persistently followed, course of pedagogical study. In this paper this subject is considered in its relation to a corps of teachers in a city of fifty or one hundred thousand inhabitants. It is assumed at the outset that the regular teachers' institute to be held once a month, is something more than a mere association, and that increase of its efficiency is greatly desired.

It may be assumed, furthermore, that but one course of study is pursued by a teachers' institute during any one year. This assumption at first glance would seem subject to criticism, inasmuch as, by the one-course plan, persons differing widely in knowledge and experience are placed in the same class and are assigned the same work. That the criticism is not valid, and that, all things considered, a single course is best, these four truths are sufficient argument:

1. Pedagogical study on the part of those actively engaged in teaching has its limitations; it cannot take the place of a course of study in a school of pedagogy, and, consequently, it must be confined to limits corresponding with the teacher's limitations in time, opportunity and general condition.

2. Every one employed as a teacher in a city school should certainly possess natural and acquired powers sufficient for the achievement of a normal degree of progress in the investigation of educational topics.

3. The constant aid of the more capable teachers is needed in the correction of the misinformed and in the guidance of the uninformed.

4. The progress of the informed class, including the superintendent, depends largely upon the activity of its members in aiding the advance of the uninformed and the misinformed.

Yet unquestionably the organizing of volunteer classes to pursue courses other than the one prescribed should be approved and still other courses, for private, individual study, should be commended; nevertheless, one course, upon which the talent and much of the time of all the teachers may be directed, not only concentrates their power but also gives unity and consistency to their work.

Of what shall the one prescribed course of pedagogical study for a city teachers' institute consist? It is obvious that the teacher's private study should not be limited to one professional subject; but it is not so plain that the institute course of study should, at any time embrace more subjects than one. While it should be the school-master's pleasure, as it is his duty, to master psychology, school management, methods, and philosophy of teaching, child study, and the history of education, yet it would be unwise for a corps of city

teachers to attempt the study of all those subjects at the same time. One professional subject well learned is worth a score and more of pedagogical memory gems. To scatter one's attention is to dissipate it—to destroy it. "Beware of the man of one book," is an adage, which has universal application. It is, therefore, believed that in a city institute during any one session the course of study should consist of only one professional subject. If that subject be given intensive study, much valuable material belonging to correlated subjects will be likewise studied. For example, it would be time spent with little profit for teachers to give nine or ten months to the study of psychology, if its bearings upon school management, methods of teaching, child study, and even the history of education should receive no consideration. In the proper study of any pedagogical subject every phase of school work can, and does, receive more or less attention. The principle of correlation applied here teaches that there should be one central subject, in the mastery of which all other related subjects would necessarily be made to render positive service. Therefore, the exercising of great care in the selection of the subject to be studied is not so important as the practising of wise diligence in carrying out the course adopted.

How shall a course of pedagogical study be prosecuted? Before a detailed answer is attempted, it may be well to note some general principles which teachers' even before they enter upon a course of pedagogical study will have no difficulty in accepting, and which will grow stronger and stronger as the work progresses.

1. Only the thirsty seek water. The teacher must be in the proper attitude toward professional improvement. He must know his need, else he will make no beginning in the work. If necessary the superintendent should render assistance at this point, and should demonstrate as clearly as possible that one's attitude toward his profession determines his standing therein, and that especially in teaching is offered a field for infinite thought and infinite progress. It is here that the superintendent should exercise in the highest degree his power of leadership, for no wise general is willing to enter upon a campaign with indifferent soldiers unambitious of victory.

2. The casual reading of much pedagogical literature will not suffice; faithful, continuous study is the one indispensable prerequisite to success. "You might read all the books in the British museum," says Ruskin, "if you could live long enough, and remain utterly an illiterate, uneducated person; but if you read ten pages in a good book, letter by letter,—that is to say, with accuracy—you are forever more, in some measure, an educated person." Here, again, in enforcing the importance of earnest study, the precept and the example of

a leader in honest work are advantageous in all cases, and in most cases absolutely necessary.

3. Through the co-operation of a number of people engaged in the same undertaking each will gain inspiration and strength. The work is typical of all the genuine work of civilization—all help each, and each helps all. It is this co-operative spirit that renders it easy for the will of the individual to express itself freely in right action—even altruistic action, the very foundation of spiritual life and progress. It is therefore, proper, that what is studied in private should be discussed publicly in the institute, that important truths may be emphasized and fixed in the minds of all, that non-essential ideas may be discriminated from those essential, and that principles learned may be applied to suit local conditions. This idea has been adopted by the American disciples of Herbart, whose public discussions of educational topics follow private, individual study of those topics—a fact which may account for the pleasure and interest and vigor these followers of the great German manifest in debate. Any teachers' meeting for which there is little preparation by all concerned, is but the occasion for much random talk in which but few participate, while the great majority sadder if not wiser, impatiently submit to voluble persecution. It is what one carries to a meeting that determines not only his contribution to others, but also the contributions of others to himself. To develop spontaneous activity in each teacher, the superintendent will need all his qualities of leadership. He will quietly, persistently encourage all to help and be helped in the sharing of the great spiritual wealth which the study of pedagogy cannot fail to develop. In the report of the Committee of Fifteen, Dr. Tarbell has stated the whole truth in these words: "When several capable and earnest people unite in a mutual effort to improve themselves and their work, all the conditions of progress are present."

A corps of teachers believing in the three doctrines just now discussed is ready to begin profitable work in an institute. At the beginning of the year the subject for study during the entire session should be selected by the superintendent, with the advice and consent of the teachers, and a text book treating of the subject chosen should be adopted. A definite lesson for each month's study should be assigned from time to time. Teachers should be encouraged to extend their reading to helpful books contained in public and private libraries, and especially in the pedagogical library belonging to the city schools. To quicken and develop the spirit of research, without which one is disqualified for the office of the teacher, should be the dominating purpose of all the work—the superintendent's chief concern. He will find it helpful to prepare, a month in advance of each institute, a

circular concerning the lesson assigned. In the circular may be given an outline of the topics to be discussed, questions founded upon the topics treated in the regular text, practical questions upon correlated topics, suggestions with respect to further research, and such other recommendations as may be expedient. By way of illustration, a portion of a circular used last year in the Houston institute is here given, the apology for giving it being that the chairman of the department requested that this paper give evidence of origin in the workshop rather than in the library:

The following outline, taken from White's "School Management," will form the basis of the lesson:

CONDITIONS OF EASY CONTROL.

1. The teacher should possess these qualifications.
 - (a) Good scholarship,—thorough and fresh knowledge.
 - (b) Skill in teaching and managing.
 - (c) Heart power,—love for pupils.
 - (d) Will power,—evenness and uniformity of control.
 - (e) Good eyes and ears,—acute discernment.
 - (f) Common sense,—practical wisdom in ordinary affairs.
 - (g) Positive moral character and life.
2. The teacher must be given requisite authority.
3. The teacher must have the confidence and co-operation of school officers and of patrons.
4. The schoolroom and its surroundings should be attractive.
5. Desks and seats should be comfortable.
6. The schoolroom should be properly heated, ventilated, and lighted.

The following statements, the first eleven of which are to be found in White's "School Management," rest upon a sound psychological basis, the only basis upon which a rational, permanent, and successful system of school discipline can be established:

1. Inborn gifts do not make the teacher any more than they make an artist or an artisan. Fruitful skill is the result of training, and hence it is that special training is becoming the recognized door to every skilled pursuit.
2. It is believed that more teachers are failing in discipline from inadequate scholarship than from any other one cause.
3. There are ten teachers failing in health from want of daily study to one whose health is impaired by such study. It is not overwork that impairs the health of so many teachers, but worry. (It is not over-study, but understudy, that impairs the discipline of so many teachers.)
4. Skill in turning a grindstone is readily acquired. Crank-turning in teaching is a simple process, and hence the large number of crank-turners in our schools.
5. The highest skill is always free from the "Company, front!" of the school martinet. It secures order, but an order born of an order-loving spirit. (Voluntary acts have mental birth preceding physical birth. Conduct, if it is not voluntary, is not good.)

6. It may be possible, and sometimes necessary, to restrain wayward pupils by authority, or to rule them by force; but they cannot be led except by true affection. There is no incentive or restraint so potent as love. Love is the last word in the vocabulary of child control.
7. The teacher's love is to be shown most conscientiously toward the pupils that need it most; not to the most deserving, but to the most needy.
8. The will has the most power in school discipline when accompanied by a silent tongue.
9. The teacher's will is most effective when unsupported by a show of force.
10. It is just as easy for two pupils to sit together all day without whispering once, as to whisper all day, provided they form the habit of sitting together without whispering.
11. Another element of governing ability is good eyes and ears; the ability to know what pupils are doing without watching them; to "take in" a school without espionage. This power may be properly called present-mindedness, as weakness in this direction is called absent-mindedness. It is soul-sight.
12. Not the most eloquent exhortations to the erring and disobedient, though they be in the tongues of men or of angels, can move mightily upon your scholars' resolution till the nameless, unconscious, but infallible presence of a consecrated, earnest heart lifts its holy light into your eyes, hallows your temper, breathes its pleading benediction into your tones, and authenticates your entire being with its open seal.—*From Huntington's "Unconscious Tuition."*
13. The glory of children is unity with nature; the glory of the teacher is unity with childhood.—*G. Stanley Hall.*
14. Education which takes no heed of the disorderly conduct of children would not be recognized as such by the children themselves. Besides, no lesson can be given in which the holding of the reins of government by a firm yet gentle hand can be dispensed with.—*Herbart.*
15. Government has only a present aim in view,—the maintenance of order; while training has in view the future adult.—*Herbart.*
16. I confess to have no conception of education without instruction, and, on the other hand, do not recognize an instruction that does not also educate.—*Herbart.*
17. Interest is direct, and does not arise from emulation, or hope of reward other than that which the subject itself affords. It is not impelled by selfishness or fear or ambition.—*Herbart.*
18. The shadows in the life of this remarkable man (Paoli of Corsica) were that he was imperious and arbitrary, and so over-mastering that he trained the Corsicans to seek guidance and protection, thus preventing them from acquiring either personal independence or self-reliance.—*From Professor Sloane's "New Life of Napoleon."*
19. Discipline in a school, in order to be of the highest and most civilizing character, must be secured without harsh means.—*Wm. T. Harris.*
20. No, it is not possible that in introducing more liberty into the régime of school discipline, more light and more reason into instruction, the cause of developing moral energy has not been served. Let us not forget, indeed, that it is in proportion as we have more reason and more will that we are better qualified to display in life the virtues of character.—*Compayré.*

At the institute for which this circular was prepared many important phases of the subject treated were considered, the method of direct questioning of individual teachers and that of voluntary discussion being employed. The fact that every teacher had been studying the lesson assigned gave all that preparation which precedes a profitable meeting. The young teacher, through independent effort, had discovered some truths, and had been made ready to apprehend other truths acquired by older teachers. To the more experienced members of the corps an opportunity for thoughtful investigation had been given, for every educational question, when studied aright, presents sufficient difficulty to tempt the labor of the most intelligent, the most gifted of men.

In conducting an institute lesson many commendable plans may be adopted, but no plan should be pursued to the exclusion of all others. *Educational Foundations*, which is, perhaps, the only American periodical devoted exclusively to the field of pedagogical courses of study, furnishes many useful suggestions concerning methods of prosecuting this work. An examination of its files discloses praiseworthy evolution. Through the efforts of its editor, Mr. Ossian H. Lang, along definite lines of development, it is to-day offering great service to students of education throughout the country. Occasionally, as part of their preparation, teachers should write answers to prescribed questions, and the answers should be read and debated in the institute following. Again, at times, written tests may be made during the progress of an institute to show the results of a month's study. "Writing maketh an exact man," says Lord Bacon, and as pedagogy, like Speaker Reed's parliamentary law, has not yet become an exact science, written pedagogical lessons can be made to serve a good educational purpose. Short, pointed papers, upon subjects assigned for study or upon kindred subjects may with great caution be allowed at long intervals; but at no institute should the whole time, or even the greater part thereof, be given over to the presentation of pedagogical essays, charm they never so wisely. The principle should be kept in mind that it is characteristic of human nature for one to enjoy work in which he himself takes an active part. At the close of a year's institute study a review, partly oral, partly written, is advisable. This review in some degree organizes the pedagogical knowledge gained during the year, gives a definite increase to the working capital of the corps of teachers, and emphasizes the one great truth governing all spiritual enterprises: "To every one that hath shall be given; but from him that hath not shall be taken away even that which he hath."

In addition to the pedagogical course of study which is to serve as

a foundation for institute work, there should be courses for the teachers of the several elementary grades, one course for high school teachers, and one for school principals. The time limit of this paper forbids a discussion of these courses. Nevertheless it seems clear that the solution of the grade meeting problem can be most easily reached through suitable, well-defined courses of pedagogical study; that similar work for high school teachers can do much to co-ordinate and unify and vitalize the teaching done by specialists; and that systematic study of problems of organization, of supervision, and of school curricula can be made of the highest practical benefit to principals, through whom the progress of the schools must be largely developed, and upon whom the superintendent must ever rely as his trusted counselors and coworkers.

The general plan outlined in this paper is capable of adaptation to cities of over 100,000 inhabitants. The superintendent of a great system of schools can have no duty more important than that of ministering to the professional spirit and power of the hundreds or thousands of teachers under his supervision. From him, through his assistants, should proceed the wholesome stimulus and the continuous direction that influence teachers to become profound students of the science of education, and that lead them, in the practice of the art of teaching, to experience the joy the artist feels when he has given fit expression to the glories his soul has seen.

WHAT SHOULD THE ELEMENTARY SCHOOL DO FOR THE CHILD?

BY MISS N. CROSEY, ASSISTANT SUPERINTENDENT OF SCHOOLS, INDIANAPOLIS, IND.

It is not the purpose of this short paper to discuss the general theory of education nor to present a complete course of study, but to point out some needs of the elementary school which have not been so thoroughly considered by your committee and which seem important in an ideal course of instruction.

The value of the five fundamental branches is not questioned; there is no other road to the fields of knowledge.

We assume that language studies are most important, because they relate the child to the civilization in which he lives and by means of which he is to work out his development.

The ability to read implies all culture. All life, all experience, everything of which man can have any knowledge, may be translated

into language. We can, however, read only what we can recognize—only something which is already in our consciousness waiting to be expressed. The effort to recognize the meaning hidden in the forms of language may help to bring our dim semi-conscious notions to clearness.

The school does not give an experience which will enable the child to make the best progress in reading. Even the mechanics of reading and language cannot be acquired by mere mechanical drill. In the past we have lost time in trying to teach the forms of language and reading without reference to the value of their content. We have failed to make these fundamental branches of the highest use in the development of mental and moral power.

Do these five branches furnish all the material and all the conditions necessary for the development of power? Can they be successfully taught without the conditions of all-sided development?

When we consider that the introduction of machinery has taken from the child in the home much of the training in forethought, patience, persistence, directive power, and manual dexterity, which the primitive industries can give, and when we remember that in the rush and care and burning competition of great cities the sun may no longer "shine into the heart of the child" but only into his eye, and that religion no longer speaks to him through his interpretation of nature nor through the art of ceremonies, we feel that the school must enlarge his opportunity for experience.

We find the elementary school in the city without workshop, gymnasium, or playground, and without the influence of art.

The child in the country, by means of work in the household and on the farm, receives training through observation, experiment, and the responsibility of purposeful work. If he be so fortunate as to receive, in addition to this, thorough instruction in the common branches, he has a broader course of study than most city schools can offer, though not all that his nature demands for its highest development, nor all that civilization demands for successful living.

Our civilization tends toward great centers. The old farm with its primitive industries will not remain. The problem is how to bring the advantages of city and country together. We must bring the country to the city by means of industrial training and the study of nature.

Three great teachers of men and of children—art, nature, and the industries (or useful arts)—have been too little regarded in the schools. These cannot take the place of grammar, mathematics, and history, but they have an influence of great importance.

Art appeals not so much to the understanding as to the higher

emotions and intuition, and rests upon the mind's power to create ideals. All the fine arts speak the same language—man's ideal nature. Truth, reason, love create the form beautiful. We see the spirit of man, the spirit of nature revealed through, and yet above, the facts. Man sees himself transformed; sees nature perfected. Art says "I am yourself as you may become." The child needs to live with, and feel its influence long before we ask him to analyze it and translate his impressions into judgments.

Poetry, music, painting, sculpture, architecture should be powerful influences in the school. Each may, in a way, be translated into the other; all give a more full and complete revelation of man's nature than one alone could give. All arts have been said to form an ascending series from architecture to poetry, at each progressive stage of which there is less dependence upon the material and more power to express the spiritual. Poetry has been regarded as the highest of arts, because through its forms the greatest range of thought and feeling can be expressed.

The house in which one lives has an influence, near or remote, upon one's character. Miss Peabody writes of Mr. Alcott's school: "Conceiving that the objects which meet the senses every day for years must necessarily mold the mind, he chose a spacious room and ornamented it, not with such furniture as only an upholsterer can appreciate, but with such forms as would address and cultivate the imagination and the heart."

The influence of art should fall silently upon the life of the child from the time the beautiful hymn is sung over the cradle until he can understand and love the wonderful symphonies written or sung, or carved in stone. These ideals influence interests and demand expression. They produce a desire to act. If beauty is cherished only as a luxurious dream, without the desire or the opportunity to put it forth into worthy effort, it may destroy instead of purifying the will—may become realized indulgence instead of the guiding light of the ideal. Art ought to give us a sense of proportion in action. I think we find some hint of this in "The Republic" in regard to the purpose of training in music: "In selecting our soldiers, and educating them in music and gymnastics, we were contriving influences which would prepare them to take the dye of the laws in perfection—the color of their opinions was to be indelibly fixed and not washed away by any such potent lye as pleasure and sorrow, fear and desire."

And "in our law of rhythms we must not aim at a variety of them or study all movements indiscriminately, but observe what are the natural rhythms of a well regulated and manly life; and when we have discovered these, we must compel the foot and the music to suit them-

selves to the sense of such a life, and not the sense to suit itself to the foot and the music."

I hope we may come to believe that temperance, moderation, and sound judgment are not cheap acquirements; that they cannot be learned by scientific lectures; that they are costly, and worth all they cost; that children must be placed in an environment which will demand temperance in feeling and action; that the body is to be trained, not as if it had a separate existence and were an end in itself, but as if it were indeed the outward expression of a sound, a beautiful, a highly complex and delicately balanced mind.

Dancing is not classed as one of the fine-arts, though it reveals the unity and harmony of the soul through the body. Dancing, free play, and organized games should constitute a part of the physical training of little children; but as the mind becomes more purposeful the training of the will should be more severe through labor and systematic gymnastics.

Music is far from being the noble discipline which it should be in the schools. We do not know half its power to idealize emotions which may become destructive; and just at a time when the uncertain and turbulent nature needs music as an influence and discipline, which may bring repose through the expression of great aspirations, the child is left to find his own forms as best he may. I think the training in elementary schools should prepare pupils to sing choruses from some of the great masterpieces. I would apply the same standard to music as to literature; as far as possible both should be classic. I should be glad to see the music festival a part of every school programme.

Music is one of the greatest aids to perfection in reading and oratory, and if there must be contests (of which I scarcely approve), let us have them for the garland of the master-singer and the orator, rather than for the prize to the athletic expert.

I need scarcely add that training by means of games is valuable, under proper restrictions, and that compelling all to take part will usually keep it within the limits of legitimate recreation.

But after all has been said in praise of the value of music and other arts (and we have given but a hint of their full value), literature is the most complete expression of life, and appeals to life with most directness and power. It may not only give us a supreme moment in ideal action, but may show us the process step by step, through which this beauty and strength have been achieved.

Literature is not to be used primarily as language-teaching, but for its influence upon character. This influence must speak ultim-

ately in noble deeds and noble language. For the reason that literature is life, we can be influenced by it.

The best influence of art is not through the understanding alone, but by immediate sympathy. We can by imagination make the deed or the thought our own. The taste for poetry cannot be acquired by much learning about poetry. The poetry of genius is a revelation to the higher nature; it is religious, and comes to the pure in heart through inner experiences of love and duty and aspiration. The word of the poet reveals us to ourselves.

The intellect must bring the facts and conditions to the spiritual sense. The understanding must serve the spirit, but its view is partial compared with the view of the creative imagination.

Below the high school the aim should be to get the general spirit through the incident; to read with enthusiasm and enjoy. A rough analysis into larger wholes and their relation to the general meaning is of value, but the exhaustive drill upon each word and phrase and the teaching of grammar and spelling from the master-pieces of literature should be avoided. The matter should be left while children are enthusiastic, and not dwelt upon until spontaneous joy and appreciation are entirely lost. The time will come when the nicer relations will be seen, and when a closer study of form and meaning will bring a more conscious enjoyment. Not until we come into full consciousness of the meaning and purpose, does it truly belong to us. History is incidental, and it is not wise to attempt a close correlation with literature. A much closer connection exists between history and geography. The masterpieces of imaginative literature belong to all times and all places.

Children should leave the elementary school with a great love for the best in art. They should know the songs of genius word for word and as art wholes—not in detached quotations. If they reach the secondary school without this rich experience we know that it is very difficult to awaken interest in the best that children should know and love.

The university has come to our aid in declaring that a written examination cannot be made to reveal all that a pupil knows of literature; that oral reading gives much of feeling and appreciation that cannot be expressed in a written test. This ought to have a very helpful influence upon the teaching of reading in the elementary school. Higher schools all believe that reading is not well taught in the grades below.

Good reading means a high degree of intelligence and an automatic command of the mechanics of the printed page; in oral reading, physical organs perfectly adapted to the utterance of thought and

feeling; sympathy, courage, good temper, and vital force. It requires the training of every power of body and mind, and is therefore the greatest discipline of powers. It calls all other disciplines to its aid. The results of training even in science and mathematics, are found in language. As the child in the school speaks more and more from interest in the subject and from real experience; as the teacher becomes a more appreciative and inspiring listener, we may hope for improvement in reading.

I have tried to call attention to the influence of art in forming ideals, the influence of ideals upon interests, and their final expression in language and conduct. The creatures of the imagination remain with us longer than the things which we call realities. We know Cordelia and Esther Summerson better than we know our best friends.

The thing we long for, that we are
For one transcendent moment,
Before the present, poor and bare,
Can make its sneering comment.

It is well understood that discipline through the common branches (reading, arithmetic, geography, history, and grammar), depends much upon preserving the right relation between thought and expression; between the theory of the subject and the art which tests the pupil's knowledge of the theory. These branches are fundamental and may be made to include, in their extension, nearly all forms of activity; but, in my opinion, not quite all that are necessary at this period of development, when we consider that there is no reaction from the study of books through industrial training in the home. We have not the best conditions for the effective teaching of the five fundamental studies.

The useful arts are said to comprehend, not only those which "lie next to instinct, as agriculture, building and weaving, but also practical chemistry and the construction of all grand and delicate tools by which man serves himself."

It is the "arts which lie next to instinct" which the growing child so much needs as self-expression. The art of making a box is not so fine an art as the art of reading a poem. It does not require such a high order of intelligence; it may not even require so much vital force or muscular strength. It is a rough adjustment to things compared with the fine adjustment to thoughts. For this reason, if for no other, it is needed for the training of undeveloped minds, and as a reaction from a finer nervous tension. It is a way of expressing purpose through muscular action—a training of mind through the nervous system which is valuable in itself at this period of growth, and valuable in preparing the mind and body for higher service. Its value is still

greater if the motive for work be some human need, and if it be directed by some necessary relation to other studies, like mathematics and physics.

We look with alarm upon the life of growing boys in cities without the discipline of physical labor, without any proper purposeful expression of life through physical activity, as a reaction from the tension necessary to the training of higher and more complex powers. A thorough system of industrial training I conceive to be not a mere incident in a course of study, but one of the immediate needs of the elementary school as a condition for making all instruction more effective.

Instruction in the common branches should be more interesting, more thorough, more heroic. This can be accomplished not by an increase in the number of hours of daily recitation, but by shorter hours, greater skill and knowledge on the part of the teacher, and proper reaction for the children. I believe the quality of our work in the grammar schools would be much improved if the first four hours of the day could be given to the ordinary studies (with proper relaxations) and the afternoon to the workshop and gymnasium and one period of study. This may require more teachers and may be one solution of the teacher's difficulty in preparing for recitations upon a variety of subjects. It seems to me that much of the manual work now given in high schools should be given in the elementary school, and that this work should be one element in making pupils capable of more sustained, more advanced thinking. Pupils go to the high school without material for reflection, without power of sustained effort. We have required much analysis and explanation and little information and expression.

Manual work should stop short of a high degree of skill excepting where the skill is a necessary means to an end, as in writing. This marks the difference between the manual training school and the trade school. "Church and state," says Goethe, "may have reason to declare themselves dominant, but in the sciences absolute freedom is necessary. In the study of nature it is necessary to inquire whether that which has been handed down to us from the past is really to be relied on to such a degree that we may safely build upon it in the future."

I believe that the spirit of observation and investigation which is natural to children should be fostered; that the habit of investigation is a training in individual freedom, and that it is helpful if directed by proper motive. Experiment for the sake of experiment is not helpful to character.

Art rests upon nature and some direct experience of its influence

is necessary to the interpretation of art. We must feel the spirit of nature in the wind, in the brook, and in the "tempered light of the woods." To the child, and to men, one of the most valuable influences of nature is the feeling of something beyond the outward appearance which "eye hath not seen nor ear heard"—the influence of the supernatural. Art has this great blessing to bring to the soul; it can take a few elements—sense objects in their isolation—and bring them into unity with life; can create the spirit, the atmosphere which gives them supernatural power.

Each study has at last only a relative value. How to secure the right relation of powers in the individual is the greatest problem in education. What is the true relation of the spiritual powers to the understanding and the senses? And in the unfolding of these powers how is action to be related to reflection?

No one of the factors of the child's life and growth has any separate existence. His emotions and interests influence his will and forecast his behavior. His physical state conditions in some degree his knowing and doing, and the quality of his knowing may well explain the motive and method of his deed.

We assume that there are higher and lower interests; or, at least, that normal interests may become abnormal, and that it is the right relation of interests and powers in our natures that makes for sanity and health.

I think that Charles Dickens has done much for education by placing before us so vividly the deformities of one-sided training—Richard, who had no steady purpose, no aim in life. "He had been eight years at a public school and had learned I understand, to make Latin verses of several sorts in the most admirable manner. But I never heard that it had been anybody's business to find out what his natural bent was, or where his failings lay, or to adapt any kind of knowledge to him. He had been adapted to the verses, and had learned the art of making them to such perfection that if he had remained at school until he was of age, I suppose he could only have gone on making them over and over again, unless he had enlarged his education by forgetting how to do it." And the Smallweed family, discarding all amusements, story books, fairy tales, fictions, and fables, "were never children, but were born for several generations, lean, anxious-minded, complete little men and women."

We have found no better way to learn a child's needs and his capacities than in the community—the school—of which he is a part. As a citizen he has rights and duties which must be defined—must be respected. And we must in this community provide for full living,

and in harmony with the complex life of the community. We should ask, as he enters the secondary school, not only "What does he know?" but "What does he love? What does he reverence and obey? To what degree, and in what ways can he freely express his power?"

DISCUSSION.

SUPERINTENDENT F. TREUDLEY, Youngstown, Ohio—There is one part of Miss Cropsey's paper to which special attention should be given, viz., the influence of the beautiful in all its forms upon life, and the desirability of its cultivation.

There are certain elements of training that literally force themselves upon the schools, because they represent necessities that cannot be ignored. They are the equipments of the breadwinner,—the man of affairs, of those conditions of life into which men come whether they will or not.

All know what they are. But over and above these lies the domain represented by art, whose ministrations are of the utmost value to the human soul. This influence will not proceed from itself alone. The beautiful does not seem to be a necessity, and the public school must charge itself with its development.

But, further let it not be forgotten that, in the higher ranges of thought, the beautiful invests very fully what in the lower stages of development seems commonplace or utilitarian in its aim. Take mathematics. It leads ultimately into the very mechanism of the universe, a mechanism whose order and form is beauty itself. Take literature. Literature may be but the artistic setting of history. It is history, as Froude most justly remarked, referring to Shakespeare.

Study such a life as that of the great English painter, Sir Frederick Leighton, lately passed away. The painter's art allies itself to history, to literature, to nature.

There is no such thing as complete severance. As Austin Phelps remarked, beauty, truth, and goodness are essential phases of whatever is worth study and reflection.

What the schools need most of all is the taking by the hand of art the essentials of human instruction and beautifying them by its power and influence. What Lowell could do as an instructor upon Dante, what Emerson could do as a teacher of philosophy, what Pierce could do in the realm of mathematics, what Barker could do in the domain of physics, the teacher must do as far as in him lies with the material upon which and with which he works.

Correlation ends in knowledge, but adequate knowledge embraces every element and relationship of the subject studied.

SUPERINTENDENT C. F. CARROLL, Worcester, Mass.—In her excellent paper Miss Cropsey made reference to freedom as a necessary part of the education of children, recommending dancing as one form of physical exercise for the kindergarten. I am not certain that it should be confined to the kindergarten, and know of no reason why children in the earlier grades should not receive the benefit conferred by such exercise. Dancing has long been taught in the kindergartens of Connecticut, and there are many in the state, and has, as I understand, been introduced into the kindergartens of Detroit. Possibly it may be found elsewhere. Nothing brings into play so perfectly every part of the body; nothing so surely gives grace and beauty to movements.

Miss Cropsey's discussion of the elementary curriculum suggests that all the common forms of the human knowledge should be early introduced into our schools, and that the study of nature is especially valuable because it compels both teachers and children to deal directly with the concrete. An examination of the cross-section of the course of study of any grade of school work to the fourth or fifth shows that we have, within a few years, largely increased the content of the work of the schoolroom in the leading cities of this country. What we need most is that this problem should be formulated.

WHAT SHOULD THE HIGH SCHOOL DO FOR THE GRADUATE OF THE ELEMENTARY SCHOOL?

BY F. LOUIS SOLDAN, SUPERINTENDENT OF SCHOOLS, ST. LOUIS, MO.

The query, what should the high school do for the graduate of the elementary school, is easily answered as regards those pupils who resort to the high school for the purpose of preparing themselves for college. Here the high school is a preparatory school and can, and should prepare the pupil for any college that he wishes to enter, by arranging a course of study that meets the college requirements.

In many high schools the number of pupils intending to enter college is a very small factor of the total number of the school. For by far the largest number of pupils the high school is the last step in their school education. The course of study for the college class, therefore, cannot fitly apply to the high school at large.

While elementary education has a pre-eminently psychological aim, namely, to develop the best powers of the child, higher education, such as represented by the university, has for its aim the transmission of the highest culture of our civilization and of the most lasting spiritual conquests of mankind to minds sufficiently matured to grasp them in their fullness.

The high school, in its character as a last step in public education may be called the people's university, because its aim is to introduce a pupil to the spiritual treasures of the race; but it also is the people's university in regard to the fact that its teaching must be largely elementary and popular. The mode of teaching the high school pupil must differ essentially from the college method, because he has not had the preparatory training which the college presupposes. The high school is a continuation of the elementary school, and its work, while of a higher range, must frequently be elementary in mode of presentation and drill. In the college the course may be elective; in the high school it should be largely prescribed.

In framing the course of study of a high school, three standpoints

seem possible: (1) We may consider chiefly the demands of life; (2) the greatest weight may be given to proficiency in leading studies; or (3) highest emphasis may be laid on the growth and development of the learner and his highest interests. For the sake of brevity, let us call these the realistic, the scholastic, and the ideal standpoints. It goes without saying that neither of these has ever been urged to the exclusion of the rest; but more stress has been laid occasionally on one than on the others. A purely realistic principle in the sense of preparing for a special calling would require a specializing of instruction which a school for general education could not undertake. In fact, the best preparation for life is the school which develops the strongest individuality and quick-witted and thoughtful industry.

The scholastic standpoint would determine the course of study of the high school by setting forth the needs of each individual study from the standpoint of the special teacher, and making the totality of such demands constitute the course of study.

The danger of certain defects is imminent in a plan designed from an exclusively scholastic standpoint.

The specialist will almost inevitably be driven to the conclusion that the pupil should have better preparation before he begins his work at the high school, and that a larger share of time should be given to it after he has commenced the study.

If a course of study originating in this plan were introduced it would indeed be a case where in each study the left hand would not know what the right one is doing. Unity of work is all the more necessary because unlike the elementary school, where the pupil is all day long in one room and under the instruction of one teacher, he passes in the high school from room to room, and is taught by a number of persons; and the personal unity of the work which the instruction by one teacher implies does not exist in the high school. It is all the more necessary, therefore, that a unifying principle should underlie the whole course of study.

From the third standpoint, which we have called the ideal, the aims of high school education might be thus defined:

- 1. The high school should communicate to its pupils the typical elements of the highest culture achievements of the race.

- 2. It should bring the pupil into close touch with the spiritual life of his country and his time.

- 3. It should awaken and widen the higher human and civic interests in the pupil, and arouse and stimulate aspirations toward an active life in their service.

The psychological demand remains pre-eminent. A course of

study must be formed not merely by the requirements of the various sciences, but by the laws and needs of the growing soul of youth.

High school education differs from that of the elementary school and from that of the college, but partakes of either; it is the connecting link between the two radically different educational principles which the two extremes of school education, the primary school and the university, contain. All education leads the mind to seize the world and hold it in a spiritual grasp. The principle of the elementary school is that the world adjusts itself to the child in order that the youth may learn to adjust himself to the world. In presenting information to little children we select, we arrange, we grade, we use all contrivances and devices which ingenuity may indicate, to help the child seize the elements of knowledge with his yet feeble grasp. As the household adjusts itself, in a measure, to the imperious baby, so serious science and the rigid world of knowledge must be modified and altered and rearranged, to be suitable to the childish taste and his power of assimilation. On the other end of the school career of man stands the university, where the demand is made that the student should grasp unaided the highest thoughts and systems of science or knowledge in their scientific independence. While at the beginning of man's education art predominates over matter, the art of teaching over the material of instruction (of which little can be given at a time, with much art in presenting it), there is, at the end of all scholastic life, in university teaching, much matter and less art—or rather, artifice—in presentation. Midway between these two extremes stands the high school.

In accordance with these views, a method should prevail in the high school which, while still considering the learner's difficulty, and therefore using the art of pedagogics in presenting matter, begins to lay more and more stress on the matter of instruction and less on pedagogical devices.

In the process of learning there is a double activity. Instruction makes the external world ideal, since every step in becoming acquainted with the material things in the world or the data of human relations means that, through the process of learning, facts become ideas. Learning, however, consists not only of receiving information, but in activity, which starts with an idea and gives to it external expression through language, the exercise of skill, or other work. Thus we find a second element in the process of learning; namely, the ideal within becomes an external reality without. When the mind is receiving information the external becomes internal; while any activity in writing, or drawing, or speaking, and the like, makes the idea actual and external. The proper play of these two sides consti-

tutes the fullness of the educational process. Assimilation and activity, or receptivity and spontaneity, are the two poles around which the world of the schoolroom—elementary school or high school—must revolve. Where one factor predominates over the other too much, readjustment is needed.

The studies which are most closely allied to the will, and which subserve the idea of making the spiritual within real without, are the arts of expression, and they should stand in a central place in a high school course of study, extending from one end of the course to the other. We expect as one of the results of higher education refinement in the modes of expression; clearer, richer, more forcible speech; writing, more logical in thought and more correct and beautiful in form. As a study of expression, drawing, too, should retain its place. There is a peculiar connection between studies that cultivate the art of expression and the life of the soul within. The physiological and mechanical element involved in their practice seems to open channels to the external world by which the soul finds a readier way to manifest itself and grow in strength and activity. The study of expression is of higher than merely formal value; it reacts on all the forms of receptivity, and knowledge becomes assimilated more easily and more thoroughly when there is a corresponding activity in which it is put to use. Drawing necessitates keener observation; expression, through language, requires clearer ideas; thus spontaneity helps receptivity, and activity helps assimilation.

As a further study in the direction of volitional training, gymnastics and calisthenics should not be denied a place.

Turning now to the side of receptivity, or to the studies which the pupil is to assimilate, physiology, perhaps, should be placed earliest in the course. Its importance for the preservation of healthful life renders it desirable that all high school children, even if they leave after the first year of study, should partake of this instruction.

The anatomical element in physiology should be limited; and those topics most necessary for self-preservation—especially hygiene—occupy the principal place. How to take care of the body, in health and disease, together with some information concerning the treatment of ordinary accidents (and, perhaps, some ideas in connection with nursing the sick) should form prominent topics. Life interests should predominate over scholastic interests.

In mathematics, algebra and plane geometry form the indispensable continuation of arithmetic in the schoolroom. The psychological importance of algebra lies in the pure mathematical reasoning which it requires; and while objective teaching is needed at the outset—since the subject is new to the child—the emphasis must be laid on that part

which gives the peculiar and necessary training for which the study has a place in the high school curriculum, namely, strict and clear reasoning.

Of natural science, botany, physics, and chemistry, together with physiology or biology, seem to form a sufficient curriculum for the four years of the high school course. On the side of the humanities general history should occupy a prominent place in the high school programme; but I would add to it lessons in United States history of much less elementary character than the corresponding study in the elementary school. In our days, economic questions stand in the foreground. While the elements of history taught in the lower schools give a child a good idea of the growth and development of our political institutions, a maturity of mind is required for the comprehension of the economic and civic topics that form the life interests of the day which the pupil in the elementary school does not possess, and which is too important to be omitted altogether. A one-volume history of the United States, somewhat in the style of Green's "Shorter History of the English People," with more stress laid on the last fifty years than on the earlier history, would be a valuable addition to our pedagogical literature.

The study of the elements of philosophy should have a place in the higher grades of the high school, both on account of the peculiar training which this study gives and also on account of the deeper insight which it tends to produce into those profound problems which have always formed the highest aim of human thought. If an enlightened view of the world is to be one of the results of high school education, this study may be granted a place, to advantage, in the university of the people. Connected therewith should be the lesson in ethics, including rules of conduct. Ethics will not make a human being moral, but it will deepen moral convictions by showing the nature of ethical action and by making ethical relations and principles clear and definite.

The art feeling is developed in the form of music in the elementary school; in the high school musical instruction should be continued and raised to a higher level by bringing to the notice of the pupil the noblest works, as far as they can be brought into the schoolroom. There is another side of art which the high school cannot neglect—representative art. If drawing lessons form part of the high school curriculum they should be connected with the history of ornament and historical design. In addition to these features the study of the history of art, grouped around representative paintings or works of architecture and sculpture, should be embodied in the high school course.

In one form art is studied in every high school in the country—in the form of literature—for which, perhaps, the artistic side (the sense of the beautiful) should receive additional emphasis.

We have spoken of language as a mode of expression; we shall now speak of it as a subject of information. In the high school the study of grammar should be carried on in two directions. It should rise to the study of style and the laws of rhetoric, and it should also trace briefly the historical development of the language, which gives the reason for existing forms, through a brief course of historical grammar.

In the study of literature great progress has been made in the last ten or twelve years by bringing the children into contact directly with the famous authors of the English tongue. In the selection of authors a historical principle should be observed, and authors of the various modern periods of English literature should be read, reserving the few authors of older times, Chaucer and Spenser, for the senior year, after historical grammar has been studied to some extent. English literature, like the Greek, has the good fortune of having one grandest representative. Just as with the Greek boy the study of Homer was an education in itself, so with the English or American high school boy or girl, the study of Shakespeare contains the elements of the grandest literary education. Shakespeare should be read not only incidentally with other authors, but should be made the special object of study for a longer period—say, for a whole year, with two or three lessons per week, in the senior class. History of literature has been justly discarded as the substitute of literature itself, and replaced by the study of authors. As a substitute the history of literature is certainly objectionable; but I am afraid we have begun to fail in the other direction. When a knowledge of literature has been obtained through three years' reading of English authors, it is proper and right that the development—the law of progress in literature—should be studied. A brief history of literature is a fitting close for the reading of authors.

While English stands in the foreground of linguistic training in the high school, at least one foreign language should be required.

Besides the selection of studies for the high school course, and their distribution over four years, a further problem needs consideration, namely, what part of the whole subject-matter of the study should be presented. In the inductive and political sciences, in particular, the field of knowledge is practically endless in every direction, and limitation becomes a necessity. The whole field of science cannot be covered, and some principle of selection must be found.

One solution would be to single out a few leading topics—say twenty or thirty typical experiments in physics or chemistry; or, to

illustrate in another direction, ten or twelve authors in English literature—and to teach these very limited selections with scholarly thoroughness, rendering the limited ground that is covered by instruction the type of the whole realm of knowledge beyond, and making the method used in teaching the few facts a key by which the pupil may unlock the other chambers in the house of science. If the whole realm of knowledge cannot be conquered, a part, at least, may be so taught that the known is the type of, and becomes the key to, the unknown which lies beyond it. The study of natural science loses its value as a means of cultivating the faculties when the method employed fails to lead to the observation of, and the activity with, the objects of nature. The tools which Providence has given to man for his life in nature are his senses and his hands. Instruction in science becomes unnatural when not based on the observation and activity of the pupil. Just as necessary as the acquaintance with archetypal forms of nature by direct inspection and of the observational facts by direct experiments in the unifying reasoning process. Not only the typical facts but the leading lines of the whole field of the study should be surveyed by the pupil. These leading lines, however, cannot always be taught by experiments performed by the pupil himself; but he must receive these truths at second hand and through experiments which he witnesses but does not perform, and by literary communication through text-book and lecture. The elimination of textbook study by laboratory work is an extreme that does not commend itself. The individual scientist knows a hundredfold more of nature than he has learned from his own personal experimenting, or he would be comparatively ignorant. Thoroughness in a limited field is not at all opposed to comprehensiveness. It is, in fact, aided by a general acquaintance with the leading lines of the subject.

These considerations enable us to formulate the principle of presentation in high school work. There should be, in the first place, the thorough study of detail in connection with some typical topics, limited in number. There should be, in the second place, the study of grand and leading lines and the comprehensive survey of principles and laws. This principle is of almost universal application. In the sciences it would mean the proper combination of laboratory and textbook work, with perhaps a preponderance of the latter. In literature it would mean a preliminary study of authors, followed by the history of literature. In history it would imply a survey of general history, followed (not preceded) by what has been called the "intensive" study of some period. The proper selection for the latter purpose would be the history of the United States in its political and economic features since the adoption of the constitution.

The tone of the high school should be manly. The instruction and discipline which it imparts should be worth a man's time to give and take, and worthy of adult intelligence and effort. The high school years are the period of rapid transition from childhood to manhood and womanhood.

In handing the treasures of learning to the little child of the elementary school, the teacher must stoop so that the child may be able to reach his gifts. In teaching mature youths the teacher must stand erect and cause the youth to lift himself towards the gift held out to him from the height of manhood. Thus only will he learn to grow. The lower classes of the high school still represent childhood, the older classes the youthful adult. The method of teaching should correspond to these conditions of nature, and rise from elementary and early beginnings to scholarly interest and effort. A manly tone should permeate the whole school. The duties of citizenship should be distinctly foreshadowed by the spirit of its discipline. While the teacher's will was largely the rule of the elementary school, the governing powers of the high school should be obedience to the reasonable law of the school, based on the exigencies of the work to be carried on and a proper respect for the rights of others. The impersonal element of law gradually supersedes personal authority. In instruction, too, the tone should be manly. The high school pupil shows in his social life instinctively where he belongs. He gravitates naturally toward the adult. The boy or girl seeks more freely the society of older persons. His relation to his parents changes from submission to companionship. The circle of his interests coincides more and more with that of the adult. His home life has changed, and he is charged in not a few cases with the duties and responsibilities of a grown person. School had better recognize these facts of life, and turn its steps in the same direction. The age of the high school pupils suggests their treatment. They will be as old when they finish the course as the college graduate was a few generations ago. A glance at the biography of any of the eminent Americans of the earlier part of the century shows this fact. Motley and Bancroft graduated at the age of seventeen; Longfellow, Emerson, and Whitney, the philologist, graduated at eighteen; Webster and Charles Sumner at the age of nineteen.

Whatever of current literature and thought moves the interests of the cultured world should find a ready place in the everyday work of the high school. The high school should not only prepare for life; it should be a piece of the life of culture such as the best American men and women lead or desire to lead.

High school education, if the unjust charge were true that it kept

youth away from the interests of life and made him insensible to its pulsations, because it locks him up in the world of the past and of scholastic and unreal abstraction, would indeed tend to unfit for life and be a failure.

The opposite course is the one which the high school should pursue with the graduate of the elementary school. It should aim at bringing him into closest touch with the highest interests of current spiritual life and to fill him with a strong desire for wholesome activity in the world of reality.

During the time that a pupil is in the high school the noble saying of Terence should ever be before the teacher's eye: "He is a *homo* being, and nothing that relates to humanity should be without interest to him."

DISCUSSION.

PRESIDENT JOSEPH SWAIN, Indiana University.—The question before us is of fundamental importance. Every teacher who teaches in a high school must answer this question. The answer he makes may be in a general and vague way, but it is included in the product he turns out from the high school. Colleges must answer this question by their prescribed courses of study for admission. Any answer which has thus far been made must be, in the nature of things, tentative; perhaps it will always be so. Our knowledge at present is too imperfect for an answer of any other kind. There are too many variable and unknown factors to permit a definite solution. In its present form it is indeterminate. If this view is correct, what shall be done? We cannot stop the schools and the growth of the children while educational men are determining the unknown and variable quantities. The world not only does move, but it must move. It is easy to give a general answer. The high school should do all it possibly can, in the four years at its disposal, to develop every power of the mind and give the pupil a healthy, vigorous body. But how can this be done is the question. There are four prominent factors in our problem: (1) The mind of the child and its development when he enters the high school; (2) the teacher; (3) the curriculum; (4) the material equipments.

We do not yet know much about the mind. Psychology is still in its infancy, I trust. I have been interested in learning that it is claimed that photography has of late developed to such a degree that the human skeleton can be photographed through the human flesh; that coins can be photographed through the leather of the purse containing them. Now, I hope our psychologists will, in the process of time, give us such a photograph of the parts of the brain, with the use and with the possibilities and means of development of each part, so we may know with precision how much and what kind of brain power the pupil should derive from the study of so much language, mathematics, science, history or literature. What is the food upon which the mind best grows. Is the soul encased in a "pentagon," with a window on each face? Does the soul grow and prosper best when it has the properly allotted time and season for sitting by each of these windows and contemplating the phenomena presented through each in turn? Or is the soul incased in some other form, with only one great bay win-

dow from which it gets its light and view? If the latter, is it science, or history, or some other subject which makes the great central range of view, and all else merely background, shade, and color, and side light?

I hope that those who set forth the theory that the soul has five windows through which it looks out on the world will accumulate evidence, no matter whether it be from speculation or the facts of experience. I hope that those who believe that history or science is the backbone of knowledge, and other subjects merely ribs and riblets, will continue to investigate their theories. I hope that those who think that any one of the fields of knowledge may be made a center for a correlation of subjects may work out their theories to a logical consequence. I trust in the fullness of time, out of all these theories, when our knowledge is more perfect, we may get to some view which is clearly demonstrable, and we may be able to see what is the best curriculum for an individual case, though it is doubted whether we will ever be able to lay down any one curriculum which is best for all cases, since so far as we know there are no two minds exactly alike. Meanwhile the school must go on. What shall we do?

I have no quarrel with those who have already found the exact curriculum for the development of the child, but there are too many exact curricula, each having the same claims, to command general confidence in any one. For myself I am inclined to believe for the present that the high school can do most for the graduate of the elementary school by giving him as a curriculum a minimum amount of those subjects which are very generally regarded as proper subjects for his study and are representative subjects in the several fields of human knowledge, and leave the rest of the course to be selected from a wide range of subjects, partly by the student and partly by the teacher.

An examination of a large number of high-school curricula of Indiana has led me to believe that the following, on the basis of four subjects five hours per week, is a safe course of study. At least three years of a foreign language, three years of composition and literature, three years of mathematics, two years of science, and two years of civil government and history, and the remaining three years (in one subject) may well be given to music and drawing and an extension of one or more of the above lines of subjects, as the best wisdom of student and teacher may suggest. Personally I should extend as much as possible the time allotted to language in this course. Undoubtedly, here, experience shows that childhood is the best period to learn the elements of language, whether viewed from the standpoint of psychology or viewed as a means to an end.

The high schools should furnish the graduates of the elementary schools with more and better teachers. The high-school teacher should be in scholarship an equivalent of the college graduate, and should have one year of professional training, either in a first-class normal school or in a department of pedagogy in a college course. If such a teacher has studied and been taught to a purpose, he may not be able to teach some one subject as all important, but he will be able to show the relationship of each subject to all the other related fields of knowledge. He will be able to show that the general lines of study which the child pursues in the high school are merely the extension of study in lines already begun in elementary grades, assuming that the elementary instruction has been as it should be, and the child is brought to the highest development possible at that period. He will lead the child to see that the subjects studied in the high school are only elementary courses in subjects, any one of which is, infinite in extent and is occupying the lifetime of the very best men the world has produced, and that there must come a time in its life, if it is to know very much about any one subject, when

it must be content to study other fields of knowledge only so far as they bear on the one subject which it has selected to make its own.

The high schools need more teachers. There is not enough individual instruction. For example, take the subject of composition. An inquiry into the amount of time devoted to composition by high schools in my own state brought out the fact that the average teacher of composition has very little time for the correction of themes written by the pupils. Unless the teacher can give considerable time to the individual needs of each pupil he cannot expect to do all he should for the graduate of the elementary school.

From the standpoint of a college man, I may say I do not sympathize with those who would separate the students going to college into one class, giving them a special course, and those whose school period ends with the high school another course. The course which is the best preparation for life should be the best for college. The whole college course should be additional preparation for life. If the high school exists in order that the pupils may be prepared for life (and I believe it does), the college exists in order that the student may be prepared for life more abundantly.

Let the high school insist that the graduate of the elementary grade shall at least attain a minimum standard set for admission to the high school; give him a course such as the common experience of educated people and the wisdom of the teacher and the tastes of the pupil, all combined, may suggest; give him a teacher with adequate scholarship and professional training, with personality and character adapted to his high calling; give him proper exercise and rest, and proper material equipment, and stimulate him to his highest endeavor; and give him at the end of his high school course a burning desire and will power to take the next step, and go to the best college he can find, and the high school will at least have done some of the things that it should do for the graduate of the elementary schools.

WHAT SHOULD THE COLLEGE AND THE UNIVERSITY DO FOR THE GRADUATE OF THE HIGH SCHOOL.

BY JAMES H. BAKER, PRESIDENT OF THE UNIVERSITY OF COLORADO.

Touching the theme of this paper, inquiries were sent to a large number of universities, colleges, and secondary schools. The first two questions related to the work of secondary education, and were as follows: (1) What should the high school graduate be when entering college? (2) What does he lack of an ideal education when he enters? Considering the general character of the questions, the answers are all that might be expected, and they are valuable for the limit of their range as well as for what they express, since they show that concerning the main purpose of education there is nothing new to be said.

In the replies the deficiencies enumerated naturally answer to the ideals demanded, and only the positive series needs to be used. I

formulate the answers that represent the consensus of the majority, or appear important as individual opinions.

1. The high school graduate, when entering college, should possess a mind educated by methods that create interest and make power to think and generalize — power to do original work.

2. He should have an acquaintance with each field of knowledge, and should show a symmetrical development of his mental activities.

3. As tending to produce greater interest, knowledge, and power, he should have been trained in only a limited number of subjects in each field; in these subjects the work should have been continuous and intensive.

4. He should have a good command of English.

5. He should be well grounded in right habits and moral principles — the practice of self-control.

While this inquiry is not strictly upon the subject assigned, it shows that the difficult problems of university life are to be solved in part by the secondary schools, and that some of the failures in higher education are due to the imperfections of earlier training. It also introduces part of the discussion that follows.

IDEALS OF HIGHER EDUCATION.

The third question pertained to higher education—What should the college or university do for the high school graduate? Some of the more important opinions received may be expressed as follows:

1. It should supplement the failures of his earlier training. There should be no chasm between secondary and higher education.

2. It should give him a liberal education. It should offer him a course that has unity and harmony. It should cultivate the power of research. It should teach him to bring all his knowledge and all his power to bear on the problems of life.

3. It should make him broad and then deep in some subject. It should start him in lines of study leading to his life work.

4. It should give him high ideals of private and civic conduct. It should make a man of him.

To consider merely the subject of college ideals would be trite and unprofitable in the extreme, and I shall use some latitude in the discussion.

THE COLLEGE AND IDEAL PREPARATION.

The influence of the college should be felt in the work of preparation. That the college should be closely articulated with the high schools is an idea of modern date, and one not yet fully accepted. An examination of the admission requirements of the college shows a variety of demands, having no common basis in principles of education

in the standard courses of high schools, or in uniform agreement. The requirements of some colleges are imperative for specific subjects that are not fundamental, but merely rank with a series of allied subjects in a given field of knowledge. Often a method of work acceptable to one college would be rejected by another. Among reputable institutions the height of the standard varies by two years. That the dissatisfaction of the high schools with these evils is deep-seated and widespread can be noted in recent papers and addresses and in repeated efforts to remove them. The fault rests mainly with the colleges and universities, and the reasons that maintain unessential distinctions are absurd in the eyes of secondary school men. If absolute uniformity in college admission is not feasible, a reasonable choice of equivalents within a given department of knowledge may be allowed. At least a plan of admission may be "organized without uniformity." I have known a college to refuse four years' excellent work in science as a substitute for some chapters in a particular book on physical geography. In another instance, a certain scientific school, requiring two years of preparation in Latin, refused a four years' course in Latin in lieu of the prescribed number of books in Caesar. A joint committee has recently been appointed by the Department of Higher Education and the Department of Secondary Education of the National Educational Association to consider further the basis of connection between the high schools and the colleges. This committee consists of eminent and able men, who will accomplish important results if given proper encouragement and aid by the National Association, and if the various local associations co-operate instead of fostering organized differences. The report of the Committee of Ten did much to prepare the way for a more complete and satisfactory connection between the colleges and the high schools, but much remains to be done which may well be undertaken by this joint committee. It is interesting to note that one of the longest sections in the report of the Royal Commission on secondary education is on the "Relation of the University to Secondary Education," and that the importance of a close connection is emphasized and the means of securing it is suggested.

The work of secondary education must be based on pedagogical principles and adapted to the stage of development which it represents, and the colleges must take up the work where the high schools leave it. Whatever is best for a given period of growth, is also good preparation for what follows. There should be no *saltus* in the process of general education. I do not mean that the colleges are not to help determine the preparatory courses of study; but they must

regard the natural order of development in grades below the college as well as ideal college standards.

By a closer union with the high schools, the colleges may help to fashion their courses, improve their methods, and may suggest the importance of placing college educated men and women in charge of the various departments of high school work. The report of the Royal Commission previously referred to, discussing the preparation of teachers for the secondary schools says: "So far as regards general education, they will obtain it, and in our opinion, ought to obtain it, not in special seminaries, but in the same schools and universities as are resorted to by persons desiring to enter the other professions. The more attractive the profession becomes, the larger will be the number of teachers who will feel that they ought to fit themselves for it by a university course." The report further says: "Whatever professional education is provided for teachers ought to have both a theoretical and a practical side. * * * Freedom and variety would, in our opinion, be best secured if the universities were to take up the task; * * * and if the science of education is to make good the claims put forward in its behalf it ought to be studied where other branches of mental and moral philosophy are fully handled by the ablest professors."

Many colleges are now doing much to increase laboratory practice in the high schools, to cultivate the spirit of investigation, to limit the number of subjects and secure good results. In Colorado the principle is generally recognized that a good preparatory education is also a good general education, and that every high school is therefore a preparatory school. The secondary school period is maintained at four years, laboratories are provided in all the schools, and Latin and German, if not Greek, are found in all. These results are largely due to the close relation in that state between secondary and higher education.

LIBERAL EDUCATION.

In the second group of opinions quoted, the philosophy is platonic rather than materialistic or utilitarian. It makes a student a man of ideal powers, possibilities, and aspirations. He possesses a nature whose development is an end in itself, whose well-being is of prime consideration. Liberal education aims to give the student a conscious realization of his powers without reference to material advantage through their use in a given occupation or profession. Through liberal education, the student acquires ideas of universal interest and essential character. He gains a comprehensive view that enables him to estimate things at their relative value; to learn the place, use, and end of each.

That liberal education should remain the ideal of at least a large part of the college course, most educators agree. Were this function of the college not a distinctive and essential one, that department of learning would of necessity be abandoned, and the direct road to practical business would be pursued. Recent addresses representing three of the greatest American universities, agree that the function of the college is to be maintained, and that acquaintance with the several fields of knowledge is necessary to the very idea of liberal education. They agree to include the field of the languages and literature; the field of the sciences and mathematics; the subjective field—that of philosophy and psychology. In the report of the commissioner of education, just published, appears a German criticism of American education, which mentions the lack of linguistic training. The writer says: "The consequences are seen in the defective linguistic-logical discipline of the mind, which, perhaps, more than the discipline in mathematical forms of thought is a requisite of all profound intellectual progress be that in linguistic, or in mathematical and scientific branches." In the University of Berlin philosophy is a required subject for all degrees.

The conservation of the ideals of the race is largely the work of liberally educated men. Some one has argued that, not through education, but through a higher standard of society and politics, will the youth of the land be reached; but society and politics depend upon ideal education and the church for their own purification.

The power of research is characteristic of modern university training, and is essential to a liberal education, as giving one the mastery of his powers. Carlyle was not far from right when he said that the true university is a library. The ability to use a library is one criterion of successful college work. Here the student gathers his own material, uses his own discrimination, formulates his opinions in the light of numerous facts and opinions, and gains self-reliance. It is the scientific method as taught by Socrates applied to all fields of study. This is the kind of work that prepares the student to grapple with the practical problems of the day.

The opinion that some portion of the college work should be prescribed appears to be well founded. This view is strengthened by the fact that many high schools are weak in one or more departments of preparation. A minimum of required work in leading departments of the college will tend to supply the deficiencies of previous training. From an inspection of the latest college catalogues it appears that all colleges exercise some kind of supervision over the choice of studies, and most of them prescribe and determine the order of more than half of the curriculum. In choice of electives many require the group sys-

tem in order that consistency may be maintained and that a definite result in some line of work may be reached.

The line of demarcation between college and university work is a variable, and the problem of definitely locating it is perplexing in the extreme. Many believe they see signs of segmentation at the end of the junior year, and predict that the senior year will adhere to the graduate school. There are many evidences that, somewhere along the line, the period of general education will be shortened, and the tendency to specialize before the end of the college course is one proof that the change is demanded. Historically the college in America stands as a whole for liberal education, but in its later development the standard has been advanced and the period of professional education has been lengthened until the problem presents new phases demanding important readjustments. Replies recently received from many institutions of higher learning touching this question, show a variety of opinions. One correspondent pithily says: "Verily we are a smattering folk. I believe both the college and the professional course should be lengthened." President Eliot advocates a three-years' course for the A.B., without disguises or complications." Estimating numerically the replies already received, something more than half favor some kind of time readjustment to the end that the period covered by the college and the professional school may be shortened one year.

THE COLLEGE AND ACTIVE LIFE.

While defending liberal education, it may be held that, especially while a four years' college course is maintained, it should also look toward the world of active influence and the filling of some vocation therein. The student's duties toward society must take on the modern aspect, as contrasted with the self-centered interest of the mediæval recluse. That education should aim at mere serene enjoyment of the true, the beautiful and the good, is an idea of the past. The mere recluse today has no meaning and no use in the world. Educated men must join the march of progress; they must take part in the solution of ethical problems; in the bettering of government and society. The world demands of them altruism, public spirit, high ideals. They should mass the forces of the past for an onward movement in the present. Old knowledge should reach out toward new and useful applications.

To this end the college should provide for a deeper knowledge of some subject or group of related subjects. This is an essential element of general education, and also has a practical aim. The principles of the philosophical and social sciences should find concrete

illustrations in the present. And, above all, student life, should be inspired with ideas of the duties and responsibilities of citizenship.

ETHICAL IDEALS.

A public statement was recently made that the seniors of a well-known university had less intellectual vigor and less moral power than the average man they might meet on the streets. If the charge be true it is a matter for serious thought; but the statement should be swallowed with a large grain of salt. It may, however, serve as a text. I believe the college must assume an amount of responsibility for the character of the undergraduate student. There has been a natural reaction against some of the unwise requirements of twenty-five years ago; but the reaction may have gone too far. One of our famous universities ten years ago adopted the policy of leaving the student to his own devices and the moral restraint of the policeman; but the plan was condemned by the patrons of the institution, and today it exercises a wise and friendly care over the student's choice of studies, his attendance upon lectures, and his daily walk and conversation. Entire freedom in student life belongs only to the graduate schools, and to place both grades of students under one system can but prove harmful.

The ethical problems of college life are not to be solved wholly by perfunctory religious exercises, but by the spirit that pervades the whole teaching and student body, and the many ways and means that the united efforts of earnest and devoted faculties may employ. It is a favorable circumstance that the student, to an extent, can choose subjects in accord with his tastes; that his powers reach out toward some great intellectual interest—the whole being goes in that direction, the soul to its object. That the spirit of education is broader, more liberal and scientific, is significant; the fact makes for truth and honesty. The historical method succeeds the dogmatic in history, social science, philosophy, and ethics. Men are better because they are broader and wiser, and are coming to a higher realization of truth.

No doubt the ethical life has the deepest significance for man. The great Fichte was right in claiming that if this is merely a subjectively phenomenal world, it is a necessary creation of mind, that we may have it wherein to work and ethically develop. I believe that institution will turn out the best men where the Baconian philosophy is combined with the Platonic, the scientific with the ideal. By some means the student should constantly come in contact with strong manhood and high ideals. It makes a practical difference whether the student believes in his transcendent nature and possibilities or in mere materialism and utilitarianism; whether his ethics is ideal or hedonistic, his view of life optimistic or pessimistic.

UNIVERSITY IDEALS.

If the question is made distinct, what should the university do for the student, there are some additional considerations.

It is enough to say of graduate courses that they should be a warrant for extended and thorough knowledge of a group of related subjects, and for original power to grasp and deal with severe problems. The candidate's knowledge and power should be publicly tested by a good old-fashioned examination and defense of thesis.

The university should refuse to admit the student to the professional schools until he has received at least the equivalent of a complete high school education. The faculties of the University of Colorado have recently entered upon an investigation of the standard of admission to the professional schools, the length of professional courses, and the relation of professional courses to the college. The results are not yet wholly formulated, and the discussion of the data collected is yet to follow. But some important facts are at hand. Very few schools of applied science in the universities require four years of preparation. Only three or four universities require that standard for their law or medical schools. Most catalogues read after this fashion: "Admission to law or medical school—a college diploma, or a high school diploma, or a second grade teacher's certificate, or evidence of fitness to pursue the subject." Less than half of the law schools require entrance qualifications, and only twenty of them require a three years' course. All medical schools advocate a thorough scientific foundation (many of them in a very ideal way) and urge extensive laboratory practice in many special subjects. The most of them think the first two years of a medical course could well be spent without clinical work. Many colleges and collegiate departments of universities provide electives that are accepted by some schools of theology, law, or medicine for their regular first year work. In rare instances studies covering two years are made common to the college and the professional schools. But only a few universities combine in their own organization a plan of shortening the period of college and professional study. Some of us in the West are struggling with these problems, and we look to the East almost in vain for encouragement. Some of us already require the same standard for admission to engineering courses as for admission to the college of liberal arts, and would gladly publish the same standard for law and medicine did the conditions in other sections of the country make it possible.

I quote from the "Report on Legal Education," 1893, issued by the United States Bureau of Education: "Admission to the bar in all

continental (European) countries is obtained through the universities, which are professional schools for the four learned professions — theology, medicine, law and philosophy. In England and America the colleges and universities are chiefly schools for general culture; only a few offer provisions for thorough professional studies. While in England and America the erroneous idea is still predominant that a collegiate education need not necessarily precede professional study, in continental Europe it is made a *conditio sine qua non*." We are unable to understand why great and wealthy universities with abundant students cater to numbers instead of quality, and make professional education in America a by-word. Their faculties surely cannot hold the opinion that the professional school should be the shortest and easiest avenue to money-making. No one more than the lawyer needs the power of general education to grasp all the facts relating to a subject, to weigh their value, discard the unessential, give prominence to the determining factors, to avoid fallacies, to argue intelligently scientific points which may be involved in litigation. No one more than the physician needs an acquaintance with psychology and philosophy; with the various sciences and the modern languages. No one more needs the power of judgment in view of seemingly contradictory facts and symptoms. No one more needs the ethical quality of the noble and honorable gentleman. May we not expect aid from the greater universities to maintain the standards which in theory all are ready to advocate.

SOME PRACTICAL RESULTS OF CHILD STUDY.

BY A. S. WHITNEY, SUPERINTENDENT OF SCHOOLS, EAST SAGINAW, MICH.

As so much literature bearing upon this topic has recently appeared from the pens of nearly all the leading advocates of this line of study, I feel unwarranted in attempting little more at this hour than to present as concisely as possible a few personal observations consequent upon the direct application of child study to the practical everyday work of the schools. In so doing, however, I desire it understood at the outset that owing to the more thorough and scientific treatment of certain long-established physical laws, it has been deemed justifiable to consider them within the scope of this paper, though well aware that the propriety of this classification may be rightly questioned.

With this explanation, then, and craving your indulgence for referring almost entirely to the work as viewed from my own supervisory standpoint, I beg leave to submit the following, somewhat in the nature of a report.

During the past school year it was deemed advisable, after some general preparation therefor had been made, to direct the attention of our teachers to the investigation of certain phases of child study, hoping thereby to arouse in them a deeper interest in child nature, to acquaint them more thoroughly with the child's growing powers and possibilities, to bring them into closer living sympathetic touch with their pupils, and at the same time to verify so far as possible the practical claims of its leading students rather than to collect large masses of facts and to attempt general deductions therefrom.

With this end in view we first turned our attention to the investigation of vision. For this purpose a supply of Snellon's test-cards was provided for the several school buildings, and all of the teachers carefully instructed how to make the proper examination. As a result, out of the 5000 pupils whose eyes were tested, an average of between 50 and 60 per cent. was found with impaired sight. This discovery was simply astounding, even to teachers of long experience. It was one thing for them to read appalling accounts of defective vision, and quite another to realize its prevalence among their own pupils. It was also discovered that in some rooms, especially those of the younger teachers, many of the defectives were assigned to the darker and more distant sections, while those of normal powers occupied the more favored sittings. The remedy for this (readjustment) was direct and immediate, and the advantages gained very great. In extreme cases, however, this was insufficient, and the desired end was sought by informing the parents of the difficulty, and strongly urging upon them the importance of consulting a physician and, if necessary, of providing properly fitted glasses. By so doing it was found that in many instances the parents were wholly ignorant of the existing defect, and were ready and willing to follow the course suggested; that others, failing to realize the necessity, were careless and indifferent and needed enlightenment; that still others, assuming the rights accorded them as independent American citizens, had no hesitancy in informing the teachers in language more forcible than courteous that it was "their business to learn their children, and not put such stuck-up notions into their heads or make dudes out of them." But in general the appeals of the teachers—appeals such as the parents had never been wont to experience—met with kind and hearty responses, and have resulted in the relieving of distress and the opening of newer and brighter worlds to many a poor unfortunate.

Standing upon the vantage ground of this experience, we next turned our attention to the examination of hearing, adopting the same methods of procedure, meeting the same difficulties, and applying the same remedies as in vision. The results were even more surprising,

showing a general average of 20 to 25 per cent. of defectives. Of this number there were many of whom most pathetic tales of physical pain of stunted intellects, of crushed spirits, might be graphically related; but to do so would simply be multiplying the already well-established evidence of our too long delay and cruel neglect.

In this connection it may be of interest to state that two years ago an attempt was made at our central school to iron out some of the many wrinkles necessarily incident to a graded system by establishing a new department and placing it in charge of one of our best and most experienced teachers. This department was denominated "unclassified" in contradistinction from "ungraded" or "truant," which bears such an unsavory reputation as to stigmatize all consigned thereto. In this are placed all pupils of the grammar grades who, for various causes, are not adaptable to the work of the regular classes, hoping thereby more perfectly to adjust matter and method to individual needs and capacities than was otherwise possible. At the time of the examinations above specified the significant fact was ascertained that every pupil enrolled in this department was suffering from defective vision, defective hearing, or from both.

When now we consider, in view of all this, that from a fifth to a fourth of all of the pupils in our public schools are suffering from defective hearing; when we consider again the acknowledged stultifying effect of this misfortune upon the intellectual, business, and community life of each, as well as upon his capacity for enjoyment; and then when we further consider what our best physicians assert, that with proper care on the part of parents and teachers this number would be reduced to 2 per cent., it requires no very great stretch of the imagination to compel the belief that vastly more practical good would redound to humanity by careful, systematized examination and treatment of these defectives than by so much religious devotion to the abstract mechanical "drills" of our fathers.

From the beneficial results of the eye and ear studies above described, as everywhere apparent, it was deemed vital to carry the work farther and to pursue it more systematically. Accordingly blanks, based upon the one suggested by Dr. Krohn in the December number of *The Child Study Monthly*, were provided for permanent record of each individual pupil, the essential requirements of which are date, grade, school, name, age, sex, nationality, postoffice address, birthplace, birthplace of father and of mother, past and present health, causes of death of father and of mother, vision, hearing, visual comparison, and visual and auditory memory. The pupils are taken aside singly or in small groups, the various tests applied, and the facts ascertained carefully recorded. These records are then made a

part of the official report of each pupil, the same as the standard items of attendance, tardiness, estimate of work accomplished, etc. While it will probably take years to realize the full salutary effect of this system, yet a sufficient amount has already been accomplished unhesitatingly to warrant the statement that in its influence upon the present and future status of both pupil and teacher it is intensely practical.

Turning from the investigation of the senses we undertook the study of children's ideas of justice by means of the Barnes story method, taking for the first test the well-known story of the mother who gave her child a box of paints with which the little one painted and spoiled all of the parlor chairs, and then ran to her mother, calling out, "Oh, mamma, come and see how pretty I have made the parlor!" The question was, "What would you have said or done had you been the child's mother?" These stories are given as regular composition exercises, the teacher never revealing by look or word their real purpose, or his own beliefs regarding them. At the close of the exercise the papers are collected, studied by the teacher, and then read to the pupils, forming topics for questions and discussion. As to its practical value, I submit the following as characteristic responses to a note of inquiry addressed to the teachers: "I never knew my pupils so well before, and never had so much sympathy for them." From another: "I never realized so fully before the individuality of my school, and the absolute necessity of treating each pupil as an individual." From another: "It gives me a much more perfect insight into the homes of my pupils, and into the parents' methods of treating their children." From another: "I never realized so fully a teacher's responsibility, as many of my own methods are plainly seen in the replies of my pupils." From another: "It is one of the most valuable exercises we have ever had, in that it shows that one of the most essential elements requisite to fit a child for highest citizenship—the cultivation of the moral judgment—has, through lack of proper exercise, been sadly neglected." These reports might be indefinitely multiplied but a sufficient number have been given, we trust, to show the value of this study as viewed by the practical grade teacher.

Again, we have endeavored to study the child by means of the Russell "still hunt" plan, urging criticism upon the course of study and general management of the schools whenever and wherever not in perfect harmony with the best interests of the growing child as thereby revealed. In consequence many interesting features have been observed, particularly those bearing upon the child's physical nature—his fears, the high nervous tension to which he is constantly subjected, etc., of which the following from one of our teachers may be

taken as a fair example, and may well serve to raise the question as to the advisability of sending home estimates of pupils' work, even as often as semi-annually: "M., seven years old, is an unusually bright child, of a nervous, high-strung disposition; quick, active, conscientious, and of a temperament to feel very keenly either joy, or sorrow. Her teacher, Miss K., does good work in school and is not at all unkind to her pupils. Three days before the semi-annual report-cards were given out, M. was taken sick with the chicken pox. The first afternoon of her illness her mother was sitting beside her sewing, when M. suddenly said: 'Mamma, do you think Miss K. will mark me "W." (worthless) because I staid out on account of the chicken pox?' 'Why, no, M., I'm sure she won't. She will mark you just according to what you did when you were there.' Satisfied for just a moment; then she cried again: 'Mamma, maybe she'll have to "mark me W." ' Another short silence. 'If she did, though, mamma, probably she'd just have to do it that way because I was out, the same as I have to stay out because I got the chicken pox, and she wouldn't be to blame any more than I would.' Again the same thought and cry kept recurring all the afternoon. In the evening the mother was called out, and I promised to look after the sick child. At eight o'clock I heard a cry from the room and ran to see what was the difficulty. I found the child sitting straight up in bed with the clothes thrown back and her black eyes blazing with excitement. She threw her little arms about my neck and sobbed out, 'Miss R., do you suppose I'll get marked "W" because I had to stay out to-day?' I took her in my arms, reassuring her as best I could, trying to quell her fear and to quiet her nervousness, and so to rock her to sleep again. Before sleep came, however, she argued with me as she had with her mother. 'Miss K. will just have to, if she does, and won't be any more to blame than I am for staying out because I had to.' Awakening again and again during the evening, the first thought of her mind and the first cry on her lips were, 'Do you think, maybe Miss K. will mark me W? ' "

This is no unusual report nor unusual incident, as every student of children knows. It is quoted simply to demonstrate that by focusing the attention of the teachers upon child study, it brings home to them more keenly than otherwise possible sympathetic appreciation of the "awfulness" of the nervous strain to which children of our schools are constantly subjected, and arouses in them earnest, thoughtful co-operation in all measures looking towards relief.

Again, accepting the conclusion of Burgstein and others relative to the unhygienic effects of long sessions, we have arranged for the lowest grade periods of rest at the close of every forty-five or fifty minutes of study. These periods are from ten to fifteen minutes in

length, and consist of recesses, gymnastics, marches, singing, etc., as the case and the state of the weather may warrant. At times the pupils simply slide down into their seats, relax all their muscles, and close their eyes in pretending sleep, while the teacher or some pupil sings a soothing lullaby. The results have more than met our expectations. The pressure is lifted, the pupils and teachers refreshed and invigorated, and more intellectual work accomplished than before. Indeed, so great do its advantages appear from every point of view that I have no hesitancy in saying that the "no recess" plan, a plan invented and fostered, for the most part, for the benefit of the teacher, should receive our merciless condemnation, or should be absolutely prohibited by law.

Stepping into a primary room near the close of the school year, a little girl with swollen eyes and tear-stained cheeks attracted my attention. The teacher, observing this, handed me a beautiful specimen of penmanship, remarking as she did so: "R. worked on this specimen earnestly and faithfully, without uttering a whimper, until she had completed it, and then she brought it to me, threw her arms about my neck, cried as if her little heart would break, and shook as if attacked with a fit of ague." Upon inquiry it was found that a large number of the pupils of this grade exhibited the same nervous overstrain and fatigue whenever engaged in this class of work, while an examination under a large magnifying glass of the specimens mentioned confirmed only too alarmingly the conclusions above stated. It was resolved at once, therefore, to abolish this exercise, and to conduct the work at the opening of the new school year in accordance with Dr. Hall's discoveries concerning the development and use of the so-called fundamental and accessory muscles and the groups of nerve-centers governing their movements. In consequence the blackboard with full-arm movement has been substituted for the fine finger-exercises of the slate and pencil, three feet of room without lines and spaces being assigned each pupil. At first it was decided to make use of the base line as a sort of a guide, and the messenger or supervisor of buildings, was instructed to cause the same to be painted. Before he had time to do so, however, our teachers had discovered, experimentally, to their great surprise, that such lines were not only unnecessary, but if used would prove an insurmountable barrier to freedom of movement—the end sought. To be sure, the pupils in the beginning did not write in a straight line; but this was quickly overcome by causing them to stand back a few feet from the board and to observe its variation. As a practical result of the application of this doctrine to the work of the first grade, as pursued in our schools, the teachers, the supervisors, and the superintendent are of one mind in stating that never

before have our pupils written so easily, so rapidly, and so well at this time of the year, and that, too, without a single case of nervous physical or mental exhaustion apparent.

In our judgment this is a grand triumph for scientific child study, and must eventually revolutionize this important branch of primary instruction.

In conclusion I would say, by way of summation, that child study has had a very marked beneficial effect. First, upon the child, in that it has led to a better understanding of his growing powers and necessities, his periods of strength and of weakness, his physical defects and their remedies. It has also led to a keener appreciation of the physical repression and mental stultification to which he is constantly subjected, and the enormous dangers arising therefrom, and to a more accurate, just and equitable interpretation and manipulation of the motives governing his hourly conduct. And, second, upon the teacher. On this point, I desire simply to confirm from the ordinary school supervisory standpoint, what has just been stated again and again by every writer upon this subject. As never before, child study has acquainted the teacher with the complexity of a child's physical and mental constitution; has magnified his concept of the child's individuality and emphasized the necessity of adapting instruction in both matter and method in conformity with it; and has brought him into more tender and loving sympathy with the child, into more perfect teaching relation with the child. It has also quickened within the teacher a more tender conscience, a more exalted ambition, and a keener sense of his own powers, limitations, opportunities and responsibilities; and, best of all, it has inspired him with a deep and hallowed reverence for the little lives intrusted to his care, and has engendered in him an insatiable thirst to implant within every growing breast the sacred ideals of highest manhood and noblest womanhood.

THE INFLUENCE OF THE KINDERGARTEN SPIRIT ON HIGHER EDUCATION.

BY JAMES L. HUGHES, INSPECTOR OF SCHOOLS, TORONTO, CANADA.

H. Courthope Bowen, the Englishman whose interpretation of Froebel's principles is most perfect sympathetically and intellectually, in his admirable work on "Froebel and Education through Self-activity," says: "Froebel was possessed of large and generous views on education as a whole, and on its methods and results as wholes; but it is the work which he did for the education of infants between the

ages of three and seven that chiefly demands our gratitude, so far as his aims have been realized up to the present. In the future, unless I am seriously mistaken, his greatest service will be in the reforms which his principles and methods will have forced on our schools and colleges." And again: "It argues, therefore, an absolute misunderstanding of the whole matter, to callously and indifferently admit that Froebel's ideas are true enough for the kindergarten and at the same time to deny that they have anything to do with the schools."

That Mr. Bowen's estimate of the influence of the kindergarten is the correct one is becoming more clear as the kindergarten is more widely introduced and more fully understood. The principles upon which the kindergarten is based are fundamental principles that should guide the teacher in the work of teaching and training the child throughout its school course. The application of principles should change as the child ascends through the advancing periods of its growth, but the laws of true educational development apply universally in the university as well as the kindergarten. These principles have influenced the work in schools and colleges even where the kindergarten itself is not recognized. Many men who still speak disrespectfully of the kindergartens are unconsciously influenced by its spirit, and are applying principles which would never have been clear to them if Froebel had not objectively revealed them by his kindergarten methods.

Dr. Harris in the preface to the "Education of Man," says: "Those who persistently read Froebel's works are always growing in insight and in power of higher achievement." There is no teacher to whom this statement does not apply. It is as true of the college professor as of the primary teacher. No other educational writings bear re-reading so well as Froebel's, because his insights were clearer, more comprehensive, more distinctive, and therefore more difficult of general comprehension, than those of any other writer. Men trained under old methods are unable fully to grasp his ideas, as they have no conceptions to which they can be definitely related. It requires experience and training to prepare the minds of teachers to apperceive Froebel's ideas. The next generation, especially those who are fortunate enough to receive a kindergarten training, will apperceive Froebel's principles more fully, and interpret him more truly than we can hope to do.

What is the kindergarten spirit? The distinctive spirit of the kindergarten is the result of Froebel's recognition of the sacredness of the child's selfhood or individuality. He taught that every child has special power, and that its fullest growth and truest education cannot be attained unless this special power becomes the dominant element in

its life—the central current to which all its other powers form tributary streams. By individuality Froebel meant the divine element in the child—the only element possessing power to stimulate and co-ordinate all its physical, intellectual and moral activities. He gave to selfhood its rightful place as the guide of the child's powers. At the same time he trained the individual powers of a child he developed its individuality. Individuality and the individual powers should be clearly distinguished. Individuality is the originating and controlling element of character that starts the individual powers to act, and guides them while at work. The motive power of character is even more important than the operative power, and should be trained more definitely. As motive power is higher than operative power it is more susceptible to training.

He believed that the divinity in the child, its individuality, its originality, its distinctive characteristics, its selfhood, was the part of its nature that should be most definitely trained; because on its development he based all his hope for the child itself, and for its uplifting influence on its fellow men.

He objected to every system that magnified knowledge at the expense of the child, and his whole life was a protest against the "stamping and molding" processes of teachers who failed to recognize the sacredness of the child's selfhood. What he valued most was not power, but creative power. He summed up his conceptions of individuality in the germ thought that "the fulfillment of man's destiny is the representation of the divine nature within him." Towards the accomplishment of this destiny by each child he constantly aimed in working out the details of every part of his educational work. This ideal made creative freedom a logical conception and gave it educational value. Without it the suggestion of creative power would be absurd, and spontaneity might lead to anarchy instead of harmonious growth towards truth, justice, and perfect freedom.

This foundation of educational principle—the recognition of the sacredness of the child's selfhood—led Froebel to discover the leading features of his educational system. It revealed to him the vital importance of the intelligent, systematic, and persistent study of the child. It made the child, and not the knowledge to be communicated to it, the focus of educational thought. It led him to make freedom and happiness the source of productive interest and the essential conditions of the child development. It taught him that the divinity in the child should not be passive or merely responsive to suggestion from others, but that selfhood should be self-active—that is, active in the conception as well as the execution of an idea; in motive as well as in deed; in originating as well as in operating; in seeing as well

as in doing—and realizing this he made self-activity the highest process of human development. It showed him that the divinity in the child should not cease to grow, but should increase in power through progressive stages, and on this he founded his law of evolution. It gave him a clear conception of the true function of the individual, as a perfect unit in the universal unity.

The study of the child, reverence for its individuality, joyousness and spontaneity, true self-activity, progressive evolution, perfect community of feeling, and co-operation in action for the accomplishment of a common beneficent purpose; these are the essential elements of the spirit of Froebel's kindergarten.

How has this spirit influenced the higher departments of educational thought and practice?

My answer must not be understood to apply to all the higher institutions of learning. The reforms wrought by the kindergarten spirit are working gradually upward from the primary through the intermediate departments. This is natural, because at first kindergarten methods were studied much more than the principles on which they are based. Until recently high school and college men could be divided into two classes; those who denied that the kindergarten had any educational value, and those who were graciously willing to admit that it might possibly possess some slight educational advantages for very young children. A great awakening has been going on in the best high schools and colleges during the last few years, and the indications are that the next ten years will do much to verify Mr. Courthope Bowen's predictions. The springtime is here, and the life is flowing upward to the apparently dead high school and college branches. Some of them are green with fresh leaves, and white already with the blossoms of progress that give promise of rich and abundant fruit.

CHILD STUDY.

A deep and widespread interest has been aroused during the past ten years in high schools, normal schools, and even universities, in scientific child study. The kindergartens undoubtedly deserve the credit for arousing this general and earnest study of the child. They made the child the center of interest, and the chief agent in its own development. They became objective representations of great principles, not as theories but as vital realities in active operation. Applied principles reveal truth more definitely in an hour than the theoretical exposition of the same truth can do in a century. The kindergartens respected the child's selfhood; they elevated it above the knowledge it is intended to use; they aimed to deal with its divinity rather than its depravity; they helped to make real Emerson's ideal, that the

child is the "sun of the world;" they proved that the child is the supreme educational factor; and by making these facts and principles objective they guided the world to the study of the child, and placed educational investigation on a logical basis.

DISCIPLINE.

The kindergarten spirit has affected the discipline of the schools more than it has yet influenced the methods of teaching. In a single generation it has transformed the disciplinary agencies of the school. Rev. J. G. Fitch said in his official report to the English government two years ago, that "the kindergarten had so thoroughly changed the discipline of the English schools that the disciplinary terms now used in the official instructions to teachers would not have been understood by them a few years ago."

Even in high schools, colleges and universities the old autocratic, domineering, arbitrary, coercive, mandatory spirit has almost disappeared. The former antagonism between teacher and pupils or students is becoming rapidly less, and the new era of co-operative harmony has dawned in good secondary schools and universities.

Froebel recognized the value of the teacher's guidance, but he realized very clearly that the teacher's influence might be too great.

His profound respect for the selfhood of the child was so great that he would not allow the teacher to overshadow it or prevent its free growth by restrictive domination. Restriction dwarfs, coercion blights, and domination destroys individuality, and therefore Froebel waged against them a war of extermination. He refused to destroy power in the effort to educate. His comprehension of the inter-relationships existing between all the truly developing processes of nature made him decide that even between essential freedom and desirable control there must be a course that produces perfect harmony, so he sought the "perfect law of liberty" that he might guide childhood without destroying its spontaneity.

He believed so thoroughly in the law of evolutionary development through successive stages of human growth that he did not expect finished character in the child. He allowed little children a condition of liberty which shocked the martinets, and agitates some of them still. He denied that anarchy was caused by freedom, but asserted strongly that it was the natural result of coercive control, and that unnatural control, especially during unconscious childhood, made it self-conscious in the weakening sense, and led to a natural indifference or resistance to constituted authority in the subsequent conscious period.

He found self-activity to be the intermediary process to produce harmony between spontaneity and control and interest to be th
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motive that leads to self-activity when the selfhood has not been made passive by arbitrary control. With loving sympathy as an attractive power, making the teacher a friend instead of a domineering autocrat, and with the interested self-activity of the child as the central thought in the teacher's philosophy, he knew discipline would soon settle itself in a natural way. He refused to believe that children are happier when they are doing wrong than when they are doing right, and never doubted for a moment that they are more contented when engaged in appropriate occupations than when idle. Productivity being, according to his philosophy, the true function of humanity, he reasoned that creative self-activity is the most perfect source of human happiness, and the only rational agency in truly developing discipline.

But, it may be answered, all children do not like to work. This statement Froebel declined to accept. It is very likely to be true, that all children do not like to do work chosen for them by their teachers, and to which they are driven by the teacher's authority. The wonder is that there is so little rebellion against work selected by others and towards which children are driven by authority and not drawn by interest. Even when the persuasive power is the witchery of loving reverence for the teacher, work chosen by the teacher never has the maximum of power to interest or develop, and cannot long hold the attention of the pupil or make the path of duty the path of pleasure. Froebel held that children do love productive work if they are trained to plan it as well as perform it. "They yield themselves," said he, "in childlike trust and cheerfulness to their formative and creative interest." The methods of most schools in the past destroyed the formative and creative interest by making the pupil passive instead of active, receptive instead of executive.

During the early, unconscious period of the child's development, Froebel would have the control of mother and kindergartner so thoroughly in harmony with the spontaneity of the child as not to be felt by it. The highest disciplinary skill of the mother or kindergartner is shown by the transference of the child's interest from evil to good in so natural a way that the child is not conscious of the external, guiding influence in making the change, or of its own surrender of one interest for another. When the child becomes conscious of its own personality the teacher's duty is still to maintain the harmony between control and spontaneity. Now, however, both the control and spontaneity belong to the pupil. The control should become self-control, and this should be developed first by a clear recognition of the rights of others, and second by the realization of the personal advantages resulting from self-control in subordinating the undesirable to the desirable in one's own tendencies. In the higher departments

- the teacher should be the confidential friend of the pupil, and not a mere dictator to whom the pupil should render unquestioning obedience. Exigencies may arise when the teacher may wisely say "thou shalt," or "thou shalt not," as the result of the "better choice between two evils." Such an incident is always a moral catastrophe, and the wise teacher undoes the evil so far as possible when the conditions that precipitated the collision have passed away.

As new generations of children trained in the kindergarten, and filled with the spirit of individual liberty and individual responsibility, rise through the schools to the universities, they will expect and receive a fuller recognition of their ability to exercise self-control and share in the management and discipline of the institutions in which they are being trained. A freer race will demand and deserve still greater freedom. When perfect freedom and full responsibility for individual action are the supreme elements in the management and discipline of colleges and universities, the young men and women in them will receive the best training in good citizenship. Self-government must create the experiences by which the mind becomes capable of apprehending the doctrines of political economy.

The kindergartens were proscribed by the Prussian government because they threatened the tyranny of imperialism. The imperious spirit of the schools fought against the child's right to liberty, and the tyrant schoolmaster would have proscribed it, too, if he had possessed sufficient power. But the kindergartens flourish even in Prussia, and the kindergarten spirit will soon completely overcome the spirit of imperious domination in the state and in the school.

SELF-ACTIVITY.

The schools are beginning to understand the meaning of Froebel's fundamental law of self-activity. When fully understood, this law is the most productive element in school work, and the surest test of true teaching.

There is a wide difference between activity and self-activity; between expression and self-expression.

Froebel's ideal of self-activity was distinctly his own. It includes the motive to action, as well as the action. It means more than action in response to the will or suggestion of another, teacher or parent. It is the expression of the selfhood of the child; the execution of the plan of the individual who is acting. It includes the originating and directing power, as well as the operating power of the child. The action of the pupil in response to the direction of the teacher is infinitely more productive than mere receptivity, but not so developing as action in response to his own definite motive.

True self-activity is the only certain method of co-ordinating the

brain of the child and developing its motor centers, and of revealing the child to its teacher and to itself in fruitful self-consciousness. It is the only way of overcoming the great weakness of humanity, which is shown by the possession of knowledge beyond the power of execution — of insight greater than the power of attainment. The highest power is the power to use power.

Self-activity is the only process by which we can secure accurate thinking by our pupils. We used to believe that our pupils were thinking while we talked to them. They did sometimes think, fortunately, about things quite foreign to the subject under consideration. Then we imagined that they were thinking when we showed them pictures or things, or when we performed experiments before them. Each of these successive steps was a distinct improvement, when compared with the step below it in the advancing sequence. But no good school is now satisfied even with experiments by the teacher either for the illustration or the discovery of the truth. In chemistry, physics, botany, cooking, sloyd, and all forms of manual training, each student is supplied with apparatus or tools and material with which to perform his own experiments and note his own discoveries.

This development is the outcome of the revelation of the principle of self-activity in the kindergarten. Froebel's exercises in the kindergarten always had two parts or stages. In the first the class followed the guidance of the teacher in gaining new knowledge or experience; and in the second each child applied its own knowledge and experience in the expression of its own conceptions and purposes. This revelation of the "inner in the outer," Froebel made the basis of the growth of selfhood and the training of operative and executive power.

Nearly all schools are yet in the first stage of Froebel's process. The second stage is much more important. The knowledge and experience of the first are of little value unless they are applied in the second stage. The real growth of the individual results almost entirely from the work of the second stage. The growth of selfhood in pupils goes on to a limited extent in schools where Froebel's idea of self-activity has never been practiced; but its growth is not due to the schools, but to the exercise of self-activity outside of school. The teachers of the world would be startled if they could examine the brain of a man who had been compelled to submit to ordinary school processes during all his waking hours till he was twenty-one years of age. Brain growth, especially in the motor centers, and the unfolding of selfhood yet depend chiefly on the work and play of the children outside of school.

Many schools are now making a partial application of Froebel's self-activity in some departments of school work. In drawing, the teacher is not satisfied with giving new thought or new elements of beauty to the pupils; each child makes its own use of the new element in making an original design or an independent application of it in association with the knowledge previously acquired. Writing and grammar are no longer taught as ends, in good schools, but as means of self-expression. Composition is no longer a dreadful formality, but is a means of revealing in visible form the conceptions of each child. When compositions have to be written as home exercises, wise teachers do not assign the subjects, but allow the pupils to select their own subjects. True self-expression means more than a statement of views in regard to questions or subjects chosen by others; it means the expression of opinions on the subject most prominent in the mind and most vitally related to the life of the writer.

There is no department of school work in which a thorough understanding of Froebel's law of self-activity will work greater reforms than in the work of oral reading. Thoughtful teachers are awakening to the fact that the expression of the thoughts of others does not develop powers to express our own. The habit of thought-expression without original thought-conception prevents the development of the power to think, and destroys the natural unity between original thought and its definite expression. If a training in the full interpretation and perfect expression of the best thoughts of the greatest writers could develop the power of self-expression, then actors would inevitably be the best speakers in the world, as they are unquestionably the best interpreters of the thought and feeling of the masterpieces of literature. But, notwithstanding the fact that they are accustomed to appear regularly before large audiences and should therefore be free from distracting self-consciousness, few actors are able to express their own views with clearness and freedom. No subject in the whole range of school work needs to be considered by teachers more carefully than the subject of reading. The methods now in use have sent out from the schools at least 97 per cent. of the pupils without an interest in any definite, systematic course of reading; they destroy the natural power of expression, they make pupils weakly self-conscious and they fail to give them the highest power of true self-expression.

Oliver Wendell Holmes said: "I had no instruction in grammar or language when I was at school. I learned to write by having something to say, and trying to say it in the best way." Henry Irving said to the students of Harvard: "If you are true to your individuality, and have great, original thoughts, they will find their way to the

hearts of others as surely as the upland waters burst their way to the sea."

The greatest opportunity for teachers to make valuable discoveries in their professional work is to be found in extending the application of Froebel's law of self-activity in the methods of teaching.

PLAY.

The kindergarten, by making play an organic part of actual school work, has led teachers to regard it as an important, if not an essential, educational process and has done much to change educational ideas and reveal the truth that the communication of knowledge is not the highest duty of the school.

Play is now recognized as the best agency in securing the complete development of the child's physical life; but it accomplishes much more than physical growth and energy. It is the best possible process by which the motor brain can be increased in size and co-ordinated with the sensory brain. It lays the basis for energetic character. It reveals the absolute importance of individual training as an essential to the success of the club or team. Every cricket, lacrosse, football, and baseball player knows that if there is one weak man on the team the whole team is weakened. Play makes clear, also, the power of organized action. These two lessons are the most important lessons the race has to learn, and play is the best objective, realistic, experimental method of revealing them.

TRUE OBJECTIVE TEACHING.

Froebel's use of material has done much to improve the methods of using objects in school. English and American teachers at first completely failed to grasp the aim of Pestalozzi in his objective work. His chief purpose was to define and develop the senses so that they might be reliable agents of the brain. English and American teachers saw in his object teaching but a new method of acquiring knowledge more rapidly and definitely, an objective teaching deteriorated into formal information lessons concerning common objects. The English Education Department proved its wisdom by prohibiting what were called object lessons in England, and their reintroduction into English schools resulted from the elevation of the ideals of teachers as a result of Froebel's better use of material in the kindergarten. Froebel made a much higher use of material than Pestalozzi. He aimed not merely to define the child's powers, but to develop its selfhood, by allowing it to use varied materials as a means of self-expression in revealing its own conceptions and in transforming its material environment so as to subordinate it to high purposes.

MANUAL TRAINING.

Froebel's use of material in the kindergarten has completely changed the ideals in regard to manual training. Educators now demand that all children, and not a few, shall have manual training; that manual training be given before the age of fourteen; and especially that manual training shall be introduced into schools for educational instead of economic or industrial reasons. There is an economic element in manual training, but it is subordinate to the educational element. The greatest function of manual training is brain-making. The motor brain has been neglected in the schools; manual training not only develops the motor brain but co-ordinates it with the sensory brain.

INDIVIDUALITY.

The recognition of the divinity in the child as shown in the kindergarten is leading to universal reverence for the child's individuality. The watchword of good schools is now freedom, not coercive domination. Teachers stand beside or behind the child when they wish to educate it to its fullest limit. The old idea was to make all the pupils as much alike as possible. The new aim is to make them as unlike as possible. God's perfect harmony and true unity are based on the perfect interrelation of unlike things. Unity is not sameness. Perfect harmony in music results from complete and definite expression of different tones at the same time. No two parts are alike, but if each part is perfect in its distinctive quality the unity makes a perfectly harmonious whole, and the perfection of the unity depends on the distinctive perfection of each individual part. Each child has an individuality or selfhood peculiarly its own, and its best growth and work are possible only as its selfhood is developed.

CO-OPERATION OR COMMUNITY OF SPIRIT.

The greatest lesson taught by the kindergarten is the need of a new morality, based on a better understanding of the teaching of Christ in regard to community of aim and altruistic purpose. Froebel saw in the perfect development of individual power as a basis for complete organic co-operation of the race the only process for the upward growth of humanity in wisdom, purity and power. The individual growth was a means, not an end. Every part of his kindergarten system leads to the higher morality of Christian community of spirit. The schools should become the great agencies in training the race in unity of higher purpose, and in defining proper conceptions of interrelationships and strengthening interdependence. It was Froebel's aim to make the kindergarten and the school a little world, where responsibility is shared by all, individual rights respected by all,

brotherly sympathy developed by all, and voluntary co-operation practiced by all. When Froebel's educational principles have been practiced long enough to make them dominant elements in human character, there will be an end to the illogical socialism that demands compulsory co-operation in defiance of individual rights.

Froebel's recognition of unity was so clear that it became the fundamental law of his system. He saw unity between man and nature; between man and God; between man's physical, intellectual and spiritual natures; between his receptive, reflective, and executive powers; and between childhood, youth, and maturity. He saw, too, the unity that should exist between the studies of the school curriculum. His kindergarten is the most perfect representation of practical correlation yet wrought out. The songs, games, stories, occupations, observation lessons, and all the work done by and for the little ones in a kindergarten, relate to one central, dominant purpose; which has some natural vital relationship to the child's life, and varies with the conditions by which the child is surrounded. Both Herbart and Froebel saw the necessity for correlation; but to Froebel, correlation was a part of his universal law of unity, and as usual with him, he made it a reality in his practical work, and thus the kindergarten is disclosing it to teachers.

APPERCEPTION.

Froebel recognized the weakness of teaching which presented knowledge to the mind, and trained the receptive agencies that they might bring it definitely to the mind, but failed to train the mind itself to make it capable of comprehending and relating the knowledge presented to it, and neglected also to stimulate the mind so that it was anxious to receive the new knowledge and add it to the similar knowledge already possessed. The primary aim of the kindergarten so far as mental development and mind storing are concerned, is to form apperceptive centers in the mind, so that all knowledge may be clearly comprehended and definitely related. Froebel secured apperception in its highest and most productive form by his law of self-activity. In self-activity the originating element is the child's own mind. Activity results from interest first aroused in the mind of the individual who acts. The mind is not responsive merely to appeals from without; it is roused and reaches out with living interest to find and grasp the new facts or principles. In the kindergarten the child's apperceptive centers are first defined, and then enlarged by active—not passive, or merely responsive—interest.

NATURE STUDY.

The kindergarten is unfolding to the schools a new and higher form of nature study. Froebel led the child to study nature, not that

its store of formal knowledge should be increased, but that its life might be purified and the process of its own evolution to higher life revealed. Nature was to Froebel a temple of life. He placed the child in sympathetic touch with nature in order that it might become acquainted with life in its growth processes and in its evolution to higher life. He believed that life must be the central element in all true religious development. He knew that apperceptive centers were as essential in spiritual development as in mental growth, and he believed that the only possible way to form religious apperceptive centers in the child's nature is to bring it into loving attitude towards nature, that it may first see the life in nature, and then recognize the unseen life behind the life of nature. He would have the child reverence the life in nature so fully as not to destroy it wantonly. He trained the child in the kindergarten to sow seeds and water the plants that came from them in order that it might realize its power to start other life to grow and help the life to still higher, grander life. The consciousness in the mind of the child that it can aid plant life to greater life will by easy transition become in the mind of the man or woman a consciousness of power to aid other human lives to nobler life. This is the most productive and most elevating apperceptive center that can be implanted in human nature.

STATE SUPERINTENDENTS' ROUND TABLE.

JACKSONVILLE, FLA., THURSDAY, FEB. 20, 1896, 2:30 p. m.

The Round Table was called to order by the Chairman, Charles R. Skinner of New York.

There were present at this meeting the following named state superintendents: Thomas B. Stockwell, Rhode Island; A. B. Poland, New Jersey; J. M. Carlisle, Texas; Mrs. A. J. Peavy, Colorado; D. M. Geeting, Indiana; W. N. Sheats, Florida; J. Q. Emery, Wisconsin; Oscar T. Corson, Ohio; G. R. Glenn, Georgia; W. W. Pendergast, Minnesota; John R. Kirk, Missouri; Charles R. Skinner, New York; E. B. Prettyman, Maryland; H. R. Corbett, Nebraska.

H. R. Corbett of Nebraska was requested by the chair to act as Secretary.

The meeting was opened by Superintendent Skinner with appropriate remarks bearing upon the importance and influence of the state superintendent's office, the great responsibility devolving upon this officer in administering the public-school system, and the advantages of confidence and co-operation.

The first topic presented for discussion was "Interstate Recognition of State Certificates and Exchange of Official Documents."

Mr. Corbett of Nebraska being called upon to present this topic, spoke of the desirability of giving proper recognition to the credentials issued by departments of public instruction in other states. The idea of giving faith and credit to the acts of one state within the bounds of another seemed to be involved. While it seemed clear that each state department should retain control of this matter without being compelled to recognize the credentials from other states, it nevertheless seemed equally clear that power should be given—by the proper legislation, if necessary—for the recognition of state certificates from other states.

Superintendent Poland of New Jersey indorsed the views just presented, and compared the professions of law, medicine, etc., to that of teaching. He suggested that the same recognition of the credentials given in other studies should prevail in respect to teaching.

Superintendent Emery of Wisconsin described the laws of Wisconsin in relation to this matter.

Superintendent Carlisle of Texas observed that a distinction between teachers' credentials and those of other professions exists in the fact that, while every individual is free to choose his own lawyer and doctor, the patrons of the school had no such choice, the teacher being selected by public authority. He deemed it, therefore, proper that more stringent regulations should prevail in the granting of credentials to teachers. He observed, further that the certificates and testimonials submitted by the teacher seemed often to be misleading as to ability and scholarship. He recommended that separate credentials be issued for scholarship and for teaching ability, and that the former only be subject to interstate recognition.

Superintendent Corson of Ohio objected strongly to any provision compelling the recognition of credentials by another state. He deemed it desirable, however, that the state department be authorized to indorse such as met its approval.

Superintendent Peavey of Colorado, Emery of Wisconsin, and Prettyman of Maryland indorsed this view, and stated that at present no such authority existed in their respective states.

On motion of Superintendent Kirk of Missouri, it was voted as the sense of the meeting that all documents issued by the state superintendents which were deemed likely to be of any interest to other state superintendents should be sent to each state department.

The next topic discussed was, "What Consideration Should Enter into a Plan for the Equitable Distribution of Public School Money?"

Superintendent Stockwell of Rhode Island presented this subject. He said that no way would secure absolute justice; the basis chosen must simply approximate it as nearly as possible. He advocated making the unit, to a large extent, the district; to some extent the distribution should depend upon the school census.

Superintendent Prettyman of Maryland advocated state and county tax as sources of revenue, the division to be among the districts *per capita*. He emphasized the idea that cities are interested in rural education and the country in metropolitan education. He spoke of the value to the entire commonwealth of the leading men, who live chiefly in cities.

Superintendent Carlisle of Texas indorsed the idea of state and county taxation. He observed that the city is built up chiefly by its wholesale interests, thereby drawing support from the country. It should therefore help support the rural schools.

Superintendent Sheats of Florida recommended average attendance as a basis rather than school census. This view was strongly indorsed by Superintendent Pendergast of Minnesota.

The next topic presented was, "What Are the Essentials of Successful Institute Work?"

Superintendent Pendergast of Minnesota emphasized the following essentials: (1) Sufficient money. (2) State control of instructors. (3) Freedom of instructors and county superintendents to arrange such courses as seemed most profitable. (He disapproved of state courses for institutes.) (4) Professional work rather than academic.

Superintendent Kirk of Missouri emphasized the importance of professional work. The institute should deal with the actual needs of the schoolroom. The place of meeting should be commodious and appropriate.

Mr. Stout of New York, State Director of Institutes, presented in a pleasing and instructive manner the strong points of the institute system of New York.

Superintendent Corson of Ohio characterized the chief needs of institute work as (1) simplicity, (2) sympathy. He drew a contrast between the school systems of New York and Ohio. In the former power and authority were centralized; in the latter decentralized; yet in both the two essentials, simplicity and sympathy, prevailed; and institute work seemed equally effective in both. He emphasized the importance of a close sympathy and intimate contact of the state office with the common people.

The next topic taken up was, "Special Points of Excellence in the Respective State Systems." The free text-book law and the free high-school attendance law of Nebraska, the taxation system of Maryland, the high-school system of Minnesota, the institute system of New York, and various points of excellence were brought out.

It was unanimously voted to thank the management of the Department of Superintendence for arranging the present series of round tables, and to request the President elected for the next year not only to continue the arrangement, but also, if possible, to give still more time for round-table discussions.

NATIONAL COUNCIL OF EDUCATION.

CONSTITUTION.

PREAMBLE.

The National Council of Education shall have for its object the consideration and discussion of educational questions of general interest and public importance, and the presentation, through printed reports, of the substance of the discussions, and the conclusions formulated. It shall be its object to reach and disseminate correct thinking on educational questions; and, for this purpose, it shall be the aim of the Council, in conducting its discussions, to define and state with accuracy the different views and theories on the subject under consideration, and, secondly, to discover and represent fairly the grounds and reasons for each theory or view, so far as to show, as completely as possible, the genesis of opinion on the subject. It shall be the duty of the Council, in pursuance of this object, to encourage from all its members the most careful statement of differences in opinion, together with the completest statement of grounds for the same. It shall further require from the chairmen of its committees the careful preservation and presentation of the individual differences of opinion whenever grounds have been furnished for the same by members of their committees. It shall invite the freest discussion of the reports of its committees, and, whenever such reports are not so amended as to embody the new suggestions developed by such discussion, any member making such suggestion or objection may put in writing his view and the grounds therefor, and furnish the same to the Secretary for the records of the Council. It shall prepare, through its President, with the aid of the chairmen of the several committees, an annual report to the National Association, setting forth the questions considered by the Council during the previous year, and placing before the Association, in succinct form, the work accomplished. It shall embody in this report a survey of those educational topics which seem to call for any action on the part of the Association. The Council shall appoint, out of its own number, committees representing the several departments of education, and thereby facilitate the exchange of opinion among its members on such special topics as demand the attention of the profession or of the public.

ARTICLE I.—MEMBERSHIP.

1. The National Council of Education shall consist of sixty members, selected out of the membership of the National Educational Association. Any member of the Association identified with educational work is eligible to membership in the Council, and after the first election such membership shall continue for six years, except as hereinafter provided.

2. In the year 1885 the Board of Directors shall elect eight members—four members for six years, two for four years, and two for two years; and the Council shall elect eight members—five members for six years, two for four years, and

one for two years; and annually thereafter the Board of Directors shall elect five members and the Council five members, each member, with the exception hereinafter provided for (section 5), to serve six years, or until his successor is elected.

3. The annual election of members of the Council shall be held in connection with the annual meetings of the association. If the Board of Directors shall fail, for any reason, to fill its quota of members annually, the vacancy or vacancies shall be filled by the Council.

4. The term of service of the several members of the Council, chosen at the first election, shall be arranged by the Executive Committee of the Council.

5. The absence of a member from two consecutive annual meetings of the Council shall be considered equivalent to resignation of membership, and the Council shall fill vacancies caused by absence from the Council as herein defined, as well as vacancies caused by death or resignation, for the unexpired term. All persons who have belonged to the Council shall, on the expiration of their membership, become honorary members, with the privilege of attending its regular sessions, and participating in its discussions. No state shall be represented in the Council by more than eight members.

ARTICLE II.—FEES.

There shall be no fee for membership in the Council of Education, but each member of it shall secure a membership in the National Educational Association by becoming a life member of the same, or by paying to the Treasurer of the association the annual membership fee of two dollars.

ARTICLE III.—MEETINGS.

There shall be a regular annual meeting of the Council held at the same place as the meeting of the National Association, and at least two days previous to this meeting. There may be special meetings of the Council, subject to the call of the Executive Committee, but the attendance at these meetings shall be entirely voluntary. The regular meeting of the committees shall take place on the days provided for the annual meeting of the Council. Meetings of committees may be called at any time by the chairmen of the respective committees, but attendance at such special meetings shall be entirely voluntary. A majority of the Council shall constitute a quorum for the transaction of business at any meeting, whether regular or called; but any less number, exceeding eight members, may constitute a quorum for the transaction of business at the regular annual meeting, as defined in this article.

ARTICLE IV.—COMMITTEES.

The general management of the affairs of the Council shall be vested in an Executive Committee, composed of the President, Vice President, and Secretary of the Council, and four other members, all of whom are to be elected by the Council at its annual meeting. There shall be twelve standing committees, each consisting of five members. They shall be appointed by the Executive Committee, and be named as follows.

1. Committee on State School Systems.
2. Committee on City School Systems.
3. Committee on Higher Education.
4. Committee on Secondary Education.

5. Committee on Elementary Education.
6. Committee on Normal Education.
7. Committee on Technological Education.
8. Committee on Pedagogics.
9. Committee on Moral Education.
10. Committee on School Sanitation, Hygiene, and Physical Training.
11. Committee on Psychological Inquiry.
12. Committee on Educational Reports and Statistics.

ARTICLE V.—DUTIES OF STANDING COMMITTEES.

The committees of the Council shall consider the topics assigned to them, and report on the same; they may select for their deliberations such other questions belonging to their departments as they deem proper to discuss.

Whenever called upon, the committees shall continue the deliberate work of the association on topics assigned to them, or prepare questions to be submitted to that body.

It shall be the duty of the standing committees to observe the new educational experiments and original investigations within the scope of their assigned topics, and report the same from time to time to the President of the Council.

ARTICLE VI.—DUTIES OF MEMBERS OF THE COMMITTEES.

The members of the Council shall render active service and assistance in the work of the committee to which they have been assigned, and further the general work of the Council as much as is in their power. They shall give their attention to the questions submitted to them, and communicate their conclusions in writing to the Chairman of the Committee.

Meeting of Committee for Special Work.—A half day at each annual session shall be set apart for "round table" discussions, and each standing committee may conduct its own meeting separately, inviting, at its pleasure, experts, original investigators, or other persons, to present their experience or theoretical views before it, for discussion.

ARTICLE VII.—DUTIES OF THE CHAIRMEN OF COMMITTEES.

The Chairman of each committee shall communicate the questions which are to be discussed to each of the members of his committee, and send them such other communications as may assist them in their work. He shall arrange a suitable plan for an exchange of opinion, and embody the conclusions arrived at in a brief report. He shall, from time to time, inform the Secretary of the Council of the progress made by his committee. He shall, with the consent of the other members of his committee, arrange special meetings at a convenient time and place. He shall see that the communications, sent in turn to each member of his committee, are promptly forwarded. He shall state distinctly (in the form of questions, when feasible) the topics on which he desires to have a brief expression of opinion from the members of his committee, and embody the substance of their answers in his report.

ARTICLE VIII.—THE WORK OF THE COMMITTEES.

The work of the committees of the Council shall be carried on in the regular meetings provided for above, and in such special meetings as can be arranged

from time to time, according to the pleasure of the committee, and principally in writing, by an exchange of briefly expressed opinions. It shall be the duty of each Chairman to devise a plan for the latter. Each member may be required to report on a part of the subject; or the whole topic may be submitted to each member, together with the opinion of the other members that have considered the subject before.

ARTICLE IX.—DUTIES OF THE COUNCIL.

It shall be the duty of the Council to further the objects of the National Association, and to use its best efforts to promote the cause of education in general.

The Council shall assign work to each committee, and receive a report on the same; it shall cause to be published such reports of committees, or parts of the same, as in its judgment should be brought to general notice; it shall present, through the President of the Council, an annual report of its work to the National Educational Association.

Arrangement of Annual Program.—The President, in making up the annual program of exercises, may select any of the twelve standing committees which will, in his opinion prepare work for the Council of the most timely and vital character, and he shall not be limited in his choice by considerations of routine.

The committee thus reporting may introduce before the Council such specialists, experts, original investigators, or inventors of new methods as they may deem essential to present effectively their subject-matter before the Council for discussion.

ARTICLE X—AMENDMENTS.

This constitution may be altered or amended, at a regular meeting of the Council, by a two-thirds vote of the members present, and any provision may be waived at any regular meeting by unanimous consent.

By-laws not in violation of this constitution may be adopted by a two-thirds vote of the Council.

OFFICERS FOR 1895-96.

HORACE S. TARBELL.....	Providence, R. I.....	<i>President.</i>
EARL BARNES.....	Stanford University, Cal.	<i>Vice President.</i>
BETTIE A. DUTTON.....	Cleveland, Ohio.....	<i>Secretary and Treasurer.</i>

Executive Committee.—The President, Vice President, Secretary; Charles De Garmo, Swarthmore, Pa.; D. L. Kiehle, Minneapolis, Minn.; J. R. Preston, Jackson, Miss.; James M. Green, Trenton, N. J.

OFFICERS FOR 1896-97.

B. A. HINSDALE.....	Ann Arbor, Mich.....	<i>President.</i>
CHARLES DE GARMO ...	Swarthmore, Pa.	<i>Vice President.</i>
BETTIE A. DUTTON.....	Cleveland, Ohio.....	<i>Secretary.</i>

Executive Committee.—The President, Vice President, Secretary; H. S. Tarbell, Providence, R. I.; J. M. Greenwood, Kansas City, Mo.; W. E. Sheldon, Boston, Mass.; W. F. King, Mt. Vernon, Iowa.

MEMBERS.

NOTE:—The letter "A" following a name denotes that the member is of the class elected by the association; the letter "C," by the Council.

<i>Term Expires.</i>		<i>Term Expires.</i>	
*W. T. Harris, Washington, D. C.....	A 1897	*C. C. Rounds, Plymouth, N. H.....	A 1900
*C. B. Gilbert, Newark, N. J.....	A 1897	J. H. Phillips, Birmingham, Ala.....	A 1900
*John E. Bradley, Jacksonville, Ill.....	A 1897	Z. Richards, Washington, D. C.....	A 1900
*Earl Barnes, Stanford Univ., Cal.....	A 1897	*James H. Baker, Boulder, Colo.....	A 1900
J. G. Schurman, Ithaca, N. Y.....	A 1897	*Oscar H. Cooper, Galveston, Texas.....	A 1900
*Charles De Garmo, Swarthmore, Pa.....	C 1897	*Aaron Gove, Denver, Colo.....	C 1900
*L. H. Jones, Cleveland, Ohio	C 1897	*Wm. E. Sheldon, Boston, Mass.....	C 1900
*Elmer E. Brown, Berkeley, Cal.....	C 1897	*Irwin Shepard, Winona, Minn	C 1900
*S. G. Williams, Ithaca, N. Y.....	C 1897	*Lucia Stickney, Cincinnati, Ohio.....	C 1900
*Nicholas Murray Butler, New York City...	C 1897	*H. H. Seerley, Cedar Falls, Iowa.....	C 1900
*Richard G. Boone, Ypsilanti, Mich.....	A 1898	James M. Green, Trenton, N. J.....	A 1901
*F. Louis Soldan, St. Louis, Mo.	A 1898	*Augustus S. Downing, Albany, N. Y.	A 1901
*Walter L. Hervey, New York City	A 1898	A. R. Taylor, Emporia, Kan.	A 1901
*Joseph Baldwin, Huntsville, Texas.....	A 1898	W. H. Payne, Nashville, Tenn.	A 1901
James H. Canfield, Columbus, Ohio.....	A 1898	J. R. Preston, Jackson, Miss.....	A 1901
*A. S. Draper, Champaign, Ill.	C 1898	Geo. P. Brown, Bloomington, Ill.....	C 1901
*William H. Maxwell, Brooklyn, N. Y.	C 1898	*Bettie A. Dutton, Cleveland, Ohio.....	C 1901
*James H. Van Sickle, Denver, Colo.....	C 1898	Chas. H. Keyes, Pasadena, Cal.....	C 1901
*B. A. Hinsdale, Ann Arbor, Mich.	C 1898	*Wm. L. Bryan, Bloomington, Ind.....	C 1901
*N. C. Dougherty, Peoria, Ill.....	C 1898	*Wm. F. King, Mt. Vernon, Iowa.....	C 1901
*W. H. Bartholomew, Louisville, Ky.....	A 1899	*Edwin C. Hewett, Normal, Ill.	A 1902
*Frank A. Fitzpatrick, Boston, Mass.....	A 1899	*Albert G. Lane, Chicago, Ill.....	A 1902
*Henry Sabin, Des Moines, Iowa	A 1899	*Euler B. Smith, Athens, Ga.....	A 1902
*E. Oram Lyte, Millersville, Pa.	A 1899	*Charles A. McMurry, Normal, Ill.....	A 1902
*J. M. Greenwood, Kansas City, Mo.	A 1899	*J. F. Millsbaugh, Salt Lake City, Utah...	A 1902
*Wm. A. Mowry, Salem, Mass.....	C 1899	*Charles M. Jordan, Minneapolis, Minn....	C 1902
John Dewey, Chicago, Ill.	C 1899	*E. W. Coy, Cincinnati, Ohio	C 1902
*Nathan C. Schaeffer, Harrisburg, Pa.	C 1899	*Horace S. Tarbell, Providence, R. I.....	C 1902
David L. Kiehle, St. Paul, Minn.	C 1899	*Edward R. Shaw, New York City	C 1902
*Mary E. Nicholson, Indianapolis, Ind.....	C 1899	*John W. Cook, Normal, Ill.	C 1902

*Present at the meeting of the Council in Buffalo, 1896.

HONORARY MEMBERS.

- Henry Barnard, Hartford, Conn.
 *William N. Barringer, Newark, N. J.
 Newton Bateman, Galesburg, Ill.
 John T. Buchanan, Kansas City, Mo.
 D. Bemis, Spokane, Wash.
 Thomas W. Bicknelli, Providence, R. I.
 *Albert C. Boyden, Bridgewater, Mass.
 Anna C. Brackett, New York City.
 Edward Brooks, Philadelphia, Pa.
 Matthew H. Buckham, Burlington, Vt.
 David M. Camp, New Britain, Conn.
 Aaron L. Chapin, Beloit, Wis.
 Clara Conway, Memphis, Tenn.
 Matilda S. Cooper, Nyack, N. Y.
 *William J. Corbell, Gorham, Me.
 J. L. M. Curry, Richmond, Va.
 V. C. Dibble, Charleston, S. C.
 John W. Dickinson, Boston, Mass.
 *Larkin Dunton, Boston, Mass.
 John Eaton, Washington, D. C.
 Chas. W. Eliot, Cambridge, Mass.
 *Geo. T. Fairchild, Manhattan, Kan.
 William W. Folwell, Minneapolis, Minn.
 W. R. Garrett, Nashville, Tenn.
 Daniel C. Gilman, Baltimore, Md.
 James C. Greenough, Westfield, Mass.
 John M. Gregory, Washington, D. C.
 W. N. Hailman, Washington, D. C.
 *G. Stanley Hall, Worcester, Mass.
 Ira G. Hoitt, Sacramento, Cal.
 J. George Hodgins, Toronto, Canada.
 James H. Hoose, Pasadena, Cal.
 George W. Howison, San Francisco, Cal.
 James L. Hughes, Toronto, Canada.
 Thomas Hunter, New York City.
 Ellen Hyde, Framingham, Mass.
 John S. Irwin, Fort Wayne, Ind.
 E. J. James, Philadelphia, Pa.
 Henry N. James, Tacoma, Wash.
 H. S. Jones, Lincoln, Neb.
 E. S. Joynes, Knoxville, Tenn.
 Thomas Kirkland, Toronto, Canada.
 Henry M. Leipziger, New York City.
 James MacAlister, Philadelphia, Pa.
 *Albert P. Marble, New York City.
 Francis A. March, Easton, Pa.
 Lillie J. Martin, San Francisco, Cal.
 Thomas J. Morgan, Washington, D. C.
 Lemuel Moss, Minneapolis, Minn.
 Birdseye G. Northrop, Clinton, Conn.
 John M. Ordway, New Orleans, La.
 *Francis W. Parker, Chicago, Ill.
 Warren D. Parker, River Falls, Wis.
 S. S. Parr, St. Cloud, Minn.
 Selim H. Peabody, New York City.
 John B. Peaslee, Cincinnati, Ohio.
 William F. Phelps, St. Paul, Minn.
 Josiah L. Pickard, Iowa City, Iowa.
 John T. Prince, Boston, Mass.
 William H. Ruffner, Lexington, Va.
 Ellan C. Sabin, Milwaukee, Wis.
 H. E. Shepard, Charleston, S. C.
 Edgar A. Singer, Philadelphia, Pa.
 James A. Smart, Lafayette, Ind.
 Homer B. Sprague, Cal.
 J. W. Stearns, Madison, Wis.
 *Thomas B. Stockwell, Providence, R. I.
 *Grace Bibb Sudborough, Omaha, Neb.
 John Swett, San Francisco, Cal.
 W. R. Thigpen, Savannah, Ga.
 H. S. Thompson, Columbia, S. C.
 L. S. Thompson, New Wilmington, Pa.
 Julia S. Tutwiler, Livingstone, Ala.
 Emerson E. White, Columbus, Ohio.
 Della L. Williams, Delaware, Ohio.
 *J. Ormond Wilson, Washington, D. C.
 H. K. Wolfe, Lincoln, Neb.
 C. M. Woodward, St. Louis, Mo.

*Present at the meeting of the Council in Buffalo, 1896.

DECEASED MEMBERS.

Robert Allyn	1894	Merrick Lyon	1888
Israel W. Andrews	1888	James McCosh	1894
N. R. H. Dawson	1895	M. A. Newell	1893
Norman A. Calkins	1895	Edward Olney	1886
Samuel S. Greene	1883	Gustavus, J. Orr	1888
Daniel B. Hager	1896	John D. Philbrick	1885
John Hancock	1891	R. W. Stevenson	1893
William D. Henkle	1882	Eli T. Tappan	1888
Elnathan E. Higbee	1889	Charles O. Thompson	1885
George Howland	1892	James P. Wickersham	1891

STANDING COMMITTEES.

BUFFALO MEETING, 1896.

The committees from which reports were received in 1896 are Nos. II., III., VII., X., XI., and XII. The topics already reported on will be found in *Italics*, with the years of the reports in parentheses.

I.—ON STATE SCHOOL SYSTEMS.

SUB-TOPICS.

- | | |
|--|--|
| 1. <i>Organization</i> (1883). | 8. <i>State, County, City and District Supervision</i> (1892). |
| 2. <i>Supervision</i> (1885). | 9. <i>The Ungraded School</i> (1895). |
| 3. <i>Licensure of Teachers</i> (1889). | N. C. Schaeffer, Harrisburg, Pa., <i>Chairman</i> . |
| 4. School Revenues. | J. H. Canfield, Columbus, Ohio. |
| 5. <i>Compulsory Education</i> (1891). | J. R. Preston, Jackson, Miss. |
| 6. <i>Tenure of Office of Teachers</i> (1887). | J. R. Schurman, Ithaca, N. Y. |
| 7. Supplying the Schools with Text Books. | Henry Sabin, Des Moines, Iowa. |

II.—ON CITY SCHOOL SYSTEMS.

SUB-TOPICS.

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|--|--|
| 1. <i>Organization</i> . | 10. Enriching the Course of Study below the High School. |
| 2. <i>Supervision</i> (1884, 1890). | 11. <i>Graded Course of Study on Herbartian Principles</i> (1895). |
| 3. <i>Superintendency</i> . | Aaron Gove, Denver, Colo., <i>Chairman</i> . |
| 4. <i>Qualification of Teachers</i> . | L. H. Jones, Cleveland, Ohio. |
| 5. <i>Classification of Pupils</i> (1886). | Ellen C. Sabin, Milwaukee, Wis. |
| 6. Ungraded Schools. | Oscar H. Cooper, Galveston, Tex. |
| 7. <i>Business Side of City School Systems</i> (1888, 1889, 1890, 1896). | N. C. Dougherty, Peoria, Ill. |
| 8. Promotions and Examinations. | |
| 9. Evening Schools. | |

III.—ON HIGHER EDUCATION.

SUB-TOPICS.

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|--|--|
| 1. <i>Higher Institutions Required</i> (1885). | 7. The Seminary Method of Instruction. |
| 2. <i>Harmonizing of Higher, Secondary, and Elementary Schools</i> (1882). | 8. <i>Professional and Technical Instruction in the University</i> (1894). |
| 3. <i>Admission to College</i> (1884). | J. E. Bradley, Jacksonville, Ind., <i>Chairman</i> . |
| 4. <i>Elective System</i> (1888). | William F. King, Mount Vernon, Iowa. |
| 5. <i>Higher Life of the American College</i> (1896). | James H. Baker, Boulder, Colo. |
| 6. What Should Precede the University? | A. S. Draper, Champaign, Ill. |
| | S. G. Williams, Ithaca, N. Y. |

IV.—ON SECONDARY EDUCATION.

SUB-TOPICS.

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|---|---|
| 1. <i>High Schools</i> (1882). | 8. Difference Between College Methods of Instruction and High School Methods. |
| 2. <i>Academies</i> (1885). | |
| 3. <i>Preparation for College</i> (1884). | |
| 4. <i>Relation of High Schools to Colleges</i> (1887). | W. H. Bartholomew, Louisville, Ky. |
| 5. <i>Opportunities of the Rural Population for Secondary Education</i> (1889). | F. Louis Soldan, St. Louis, Mo. |
| 6. <i>Schools by Correspondence.</i> | H. H. Seerley, Cedar Falls, Iowa. |
| 7. <i>Uniformity in Requirements for Admission to College</i> (1891). | John T. Buchanan, Kansas City, Mo. |
| | Horace S. Tarbell, Providence, R. I. |

V.—ON ELEMENTARY EDUCATION.

SUB-TOPICS.

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|--|--|
| 1. <i>Course of Study</i> (1882). | 9. <i>The Uses of Literature in Elementary Education</i> (1892). |
| 2. <i>Oral Teaching</i> (1884). | |
| 3. <i>Text-Books</i> (1886). | 10. <i>Economy in Elementary Education</i> (1895). |
| 4. <i>Waste in Elementary Education</i> (1888). | Geo. P. Brown, Bloomington, Ill., <i>Chairman.</i> |
| 5. Kindergarten. | |
| 6. Language Lessons in Elementary Schools. | William E. Sheldon, Boston, Mass. |
| 7. Science Teaching in Lower Grades. | Zalmon Richards, Washington, D. C. |
| 8. <i>Essentials in Elementary Education</i> (1890). | J. H. Phillips, Birmingham, Ala. |
| | Bettie A. Dutton, Cleveland, Ohio. |

VI.—ON NORMAL EDUCATION.

SUB-TOPICS.

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|---|--|
| 1. Kind of Normal Schools Required. | 7. Normal School Extension. |
| 2. <i>Academical and Professional Training</i> (1883, 1889). | 8. <i>The Kind and Amount of Practice-Work and Its Place in the Normal School Course</i> (1895). |
| 3. <i>Practice Departments</i> (1885). | R. G. Boone, Ypsilanti, Mich., <i>Chairman.</i> |
| 4. <i>City Normal Schools</i> (1891). | Irwin Shepard, Winona, Minn. |
| 5. <i>Teachers' Institutes</i> (1887). | James M. Green, Trenton, N. J. |
| 6. <i>The Relation of the Normal School to Other Institutions of Learning</i> (1892). | William L. Bryan, Bloomington, Ill. |
| | John G. Cook, Normal, Ill. |

VII.—ON TECHNOLOGICAL EDUCATION.

SUB-TOPICS.

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|--|---|
| 1. <i>Technical Training in Public Schools</i> (1881). | 7. <i>The Preparation of Manual Training and Technical Teachers a Function of the Technical College</i> (1896). |
| 2. Preparation for Institutes of Technology. | C. M. Woodward, St. Louis, Mo., <i>Chairman.</i> |
| 3. <i>Pedagogical Value of the School Workshop</i> (1886). | Selim H. Peabody, Chicago, Ill. |
| 4. <i>Agricultural Colleges</i> (1888). | Euler B. Smith, Athens, Ga. |
| 5. Summer Schools of Science. | William H. Payne, Nashville, Tenn. |
| 6. <i>Relation of Technological to Liberal Education</i> (1894). | Charles H. Keyes, Pasadena, Cal. |

VIII.—ON PEDAGOGICS.

SUB-TOPICS.

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|--|--|
| 1. <i>Chair of Pedagogy in Colleges</i> (1882). | 10. <i>Scope and Character of the Pedagogical Work in Universities</i> (1892). |
| 2. <i>Pedagogy as a Science</i> (1884). | 11. <i>The Laws of Mental Congruence and Energy Applied to Some Pedagogical Problems</i> (1895). |
| 3. <i>Pedagogical Inquiry.</i> | |
| 4. <i>Function of Public Schools</i> (1886, 1887). | Nicholas Murray Butler, New York City, Chairman. |
| 5. <i>Educational Value of Manual Training</i> (1889). | David L. Kiehle, Minneapolis, Minn. |
| 6. <i>Moral Education.</i> | A. R. Taylor, Emporia, Kan. |
| 7. <i>Pedagogical Terminology.</i> | Charles A. McMurry, Normal, Ill. |
| 8. <i>The Education of the Will</i> (1891). | B. A. Hinsdale, Ann Arbor, Mich. |
| 9. <i>Distinguishing Ideas in the Herbartian System of Pedagogy.</i> | |

IX.—ON MORAL EDUCATION.

[Changed from—"On the Education of Girls," 1891.]

SUB-TOPICS.

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|--|---|
| 1. <i>Co-education</i> (1883, 1890). | 7. <i>Moral Instruction in the Elementary Schools</i> (1896). |
| 2. <i>Technical Training for Girls</i> (1886). | Emerson E. White, Columbus, Ohio., Chairman. |
| 3. <i>What Education is Best</i> (1888). | Charles De Garmo, Swarthmore, Pa. |
| 4. <i>The Education of Girls</i> (1891). | Lucia Stickney, Cincinnati, Ohio. |
| 5. <i>Practical Culture of the Moral Virtues</i> (1892). | Charles C. Rounds, Plymouth, N. H. |
| 6. <i>Direct and Indirect Moral Teaching.</i> | J. F. Millspaugh, Salt Lake City, Utah. |

X.—ON SCHOOL SANITATION, HYGIENE, AND PHYSICAL TRAINING.

[Changed from—"On Hygiene in Education," 1891.]

SUB-TOPICS.

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|---|---|
| 1. <i>Sanitary Exercises and Appliances in Public Schools</i> (1883). | 6. <i>School Room Hygiene</i> (1896). |
| 2. <i>Recesses</i> (1884, 1885). | William A. Mowry, Hyde Park, Mass., Chairman. |
| 3. <i>Relation of Mental Labor to Physical Health</i> (1887). | Mary E. Nicholson, Indianapolis, Ind. |
| 4. <i>Harmonious Development</i> (1889). | Joseph Baldwin, Austin, Tex. |
| 5. <i>Physical Education</i> (1891). | F. A. Fitzpatrick, Boston, Mass. |
| | C. B. Gilbert, Newark, N. J. |

XI. ON PSYCHOLOGICAL INQUIRY.

[Changed from—"On Educational Literature," 1891.]

SUB-TOPICS.

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|---|--|
| 1. <i>School Reports</i> (1885). | 7. <i>How the Will Combines with Intellect in the Higher Orders of Knowing</i> (1896). |
| 2. <i>Books on Pedagogy</i> (1888). | E. O. Lyte, Millersville, Pa., Chairman. |
| 3. <i>Use of General Libraries</i> (1887). | William T. Harris, Washington, D. C. |
| 4. <i>Educational Literature</i> (1890). | N. A. Calkins, New York City. |
| 5. <i>Relation of Mnemonic Systems to the Cultivation of the Power of Thought</i> (1892). | Edwin C. Hewitt, Normal, Ill. |
| 6. <i>The Psychology of the Imitative Functions in Childhood</i> (1894). | Earl Barnes, Stanford University, Cal. |

XII.—ON EDUCATIONAL REPORTS AND STATISTICS.

[Changed from—"On Educational Statistics," 1891.]

SUB-TOPICS.

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|---|------------------------------------|
| 1. <i>Reforms in Statistics</i> (1885, 1887). | J. M. Greenwood, Kansas City, Mo. |
| 2. <i>What Statistics Should be Collected</i> (1889, 1891). | E. W. Coy, Cincinnati, Ohio. |
| | A. J. Rickoff, Berkeley, Cal. |
| William H. Maxwell, Brooklyn, N. Y., <i>Chairman</i> . | Augustus S. Downing, Albany, N. Y. |

NOTE:—The committees for 1897 will be organized and announced to members by the President of the Council, at an early date.

NATIONAL COUNCIL OF EDUCATION.

SECRETARY'S MINUTES.

FIRST DAY.

OPENING SESSION.—BUFFALO, N. Y., July 3, 1896.

The Council assembled in the People's Church, and was called to order at 9:45 a. m., by the President, Horace S. Tarbell.

Twenty-five members of the Council were present. President Tarbell stated that E. E. White, Chairman of the Committee on Moral Instruction in the Elementary Schools, was absent on a foreign tour, and called on William T. Harris to introduce the subject.

Mr. Harris was followed in discussion by C. C. Rounds, Charles De Garmo, B. A. Hinsdale, John E. Bradley, Larkin Dunton, William N. Barringer, and George T. Fairchild. Papers were presented by members of the committee—first by Miss Lucia Stickney of Ohio, entitled, "The Incidental Method of Moral Instruction," and second by J. F. Millspaugh of Utah, on "The Ethical Value of History in Elementary Schools." C. C. Rounds of the committee continued the discussion, which was closed by Mr. Harris.

The Council adjourned to 3 p. m.

AFTERNOON SESSION.

The Council opened its session at 3 p. m. In the absence of the entire committee on Technological Education, the discussion of a paper on "The Preparation of Manual and Industrial Training Teachers a Function of the Technical School," sent by Charles H. Keyes of California, a member of the committee, was opened by George T. Fairchild of Kansas, and continued by William E. Sheldon of Massachusetts, C. C. Rounds of New Hampshire, S. G. Williams of New York.

The Council adjourned at 5 p. m.

SECOND DAY.

MORNING SESSION.—SATURDAY, JULY 4TH.

The Council met at 9:45 a. m.

On motion of C. C. Rounds, seconded by William F. King, committees were appointed.

1. *Committee on Membership of the Council.*

C. C. Rounds of New Hampshire, B. A. Hinsdale of Michigan, C. B. Gilbert of New Jersey.

2. *Committee on Nomination of Officers.*

John E. Bradley of Illinois, Miss Lucia Stickney of Ohio, S. G. Williams of New York.

3. *Committee on Railroads.*

William E. Sheldon of Massachusetts, E. W. Coy of Ohio, Charles De Garmo of Pennsylvania.

On motion of William E. Sheldon, members presenting papers were requested to furnish reports of the discussions of the same through the remaining sessions of the Council.

The subject for the morning's discussion was presented as a report of the Committee on Higher Education, by the chairman, John E. Bradley of Jacksonville, Ill., in a paper entitled, "The Higher Life of the College."

The discussion was opened by Charles De Garmo and continued by B. A. Hinsdale, S. G. Williams, William A. Mowry, N. C. Schaeffer, Larkin Dunton, William N. Barringer, C. B. Gilbert, Aaron Gove, and James H. Baker.

Mr. Bradley closed the discussion and the Council adjourned to 3 p. m.

AFTERNOON SESSION.

The Council convened at 3 p. m., and listened to the report of the Committee on Psychological Inquiry, in an address by William T. Harris entitled, "How the Will Combines with the Intellect in the Higher Orders of Knowing." Questions were asked and the topic continued by Messrs. De Garmo, Hinsdale, Dunton, Sheldon, Baker, Soldan, and Fairchild. Mr. Harris made the closing remarks and the Council adjourned at 5 p. m.

THIRD DAY.

MORNING SESSION.—MONDAY, JULY 6TH.

The Council was called to order at 9:45 a. m.

President Tarbell presented President Viele of the University Club, who invited the gentlemen of the Council to make use of the rooms of the Club while in Buffalo. A motion of acceptance by Mr. Bryan was unanimously adopted.

Cards of invitation to the Council to a reception at the Chapter House were received from the secretary of the Woman's Teachers' Association, in behalf of Superintendent and Mrs. Emerson, and the Principals' and Teachers' Associations. On motion of Mr. Bradley, seconded by Mr. Sheldon, the invitation was accepted.

The report of the Committee on School Sanitation, Hygiene, and Physical Training was presented by the chairman, William Mowry of Massachusetts, in a paper on "Schoolroom Hygiene."

The discussion was led by Mr. Williams and continued by Messrs. Gove, Greenwood, Bryan, Gilbert, Sheldon, Barringer, Jones, Schaeffer, Baldwin, Dunton, Hinsdale, and Hewett. Mr. Mowry closed the discussion.

AFTERNOON SESSION.

The Council convened at 3 p. m.

The report of the Committee on City School Systems was presented by the chairman, Mr. Aaron Gove of Denver, Colo., in a paper entitled "The Business Side of City School Systems."

Speakers continuing the discussion of this topic were limited to two minutes.

Remarks were made by Messrs. Dougherty, Draper, Greenwood, Harris, Gilbert, Hinsdale, Mowry, Schaeffer, Sabin, Soldan, Dunton, and Jones. Mr. Gove closed the discussion.

Mr. Tarbell expressed the thanks of the Council to the Local Committee for the very excellent arrangements for the meetings throughout the Session.

On motion of Mr. Bryan a committee of five was appointed to consider the advisability of organizing a General Committee on School Hygiene. President Tarbell named the committee as follows:

William L. Bryan of Indiana, Larkin Dunton of Massachusetts, H. H. Seerley of Iowa, L. H. Jones of Ohio, N. C. Schaeffer of Pennsylvania.

The President introduced Superintendent Emerson of the Buffalo Schools, who tendered the freedom of the superintendent's office, with copies of annual reports and courses of study.

Mr. Bartholomew, chairman of the Committee on Secondary Education, explained the absence of the report from his Committee, and the topic assigned for Tuesday a. m. was substituted.

President Tarbell announced a change of time for Tuesday's session to 9 a. m., and the Council adjourned.

FOURTH DAY.

EXECUTIVE SESSION.—TUESDAY, A. M., JULY 7TH.

The Council was called to order by President Tarbell at 9 a. m., and on motion of S. G. Williams of New York the memorial to Dr. Norman A. Calkins was presented by E. C. Hewett of Illinois. Brief tributes to the memory of Dr. Calkins were also offered by C. C. Rounds of New Hampshire, W. E. Sheldon of Massachusetts, B. A. Hinsdale of Michigan, Joseph Baldwin of Texas, and E. W. Coy of Ohio.

On motion of Mr. Coy the paper presented by Mr. Hewett was adopted by the Council and directions given that it be printed in full in the proceedings. On amendment by John W. Cook of Illinois the remarks of the other members were included. (See report of Committee on Necrology.)

A motion was made by Miss Nicholson of Indiana that the president for 1897 be requested to provide on his program for a discussion on "Æsthetic Education." Mr. Gilbert of New Jersey offered an amendment that such committee be substituted for the Committee on Educational Reports and Statistics. Mr. Rounds of New Hampshire suggested the liability of the Council being too much bound by committees; that freedom of work allowing introduction of such topics as the Council may choose is desirable.

Mr. Hinsdale believed the work of the Committee on Statistics was valuable and should be continued. Mr. Sheldon referred to the action of the Council at Toronto in 1891 and agreed with the position of Mr. Hinsdale.

Further remarks were made by Messrs. Mowry, Coy, Barnes, and Gove.

Mr. Gilbert withdrew his amendment, Miss Nicholson's motion was carried, and on motion of Mr. Hewett, Miss Nicholson was invited to make the report.

Superintendent Gilbert offered the following amendments to the constitution:

ART. VII. Amend by inserting after "Committee" in first line "selected by the President for a report," and after "shall" the words "not later than Jan. 1st preceding the meeting of the Council at which such report is to be presented."

ART. IX. Add to Sec. II, "and shall announce such selection to the Chairman of the committee selected not later than Dec. 1st preceding the meeting of the Council at which the reports are to be presented."

The resolution by Mr. Gilbert to adopt the amendment offered was lost.

The Committee on Rural Schools appointed at Denver reported progress and the following resolution, offered by Chairman Sabin, was approved.:

Resolved, That, in order to enable the Committee on Rural Schools, appointed at Denver in July 1895, to make a thorough and exhaustive report such as the importance of the subject demands, the Board of Directors of the National Educational Association be requested by this Council to set apart an additional \$1000 from the funds of the National Educational Association for the use of said committee under the same restrictions as were imposed when the original appropriation was granted at Denver.

The report of the Committee on Hygiene was called by the President and was presented by N. C. Schaeffer of Pennsylvania.

Members of the National Council:

Your committee appointed to consider the advisability of organizing a general committee on School Hygiene respectfully recommend,

That such committee be organized by the appointment of five members of this Council who shall have power to invite the co-operation of experts in the various sciences touching School Hygiene.

That the committee be instructed to make this report in 1898.

That the Council request the Trustees of the National Educational Association to appropriate \$2500 to pay expenses necessary in connection with the work of the committee.

N. C. SCHAEFFER,
Chairman.

Mr. Sheldon objected to the appropriation of \$2500. Mr. Hinsdale did not object to this committee, but believed enough committee-work was already in hand, and moved that the motion be laid on the table until the next year. Carried.

Mr. Harris asked permission to introduce Mr. McVicar to present a question of Southern education. This request was granted and following Mr. McVicar's remarks Mr. Harris offered the following resolution, which was unanimously adopted:

Resolved, That the chairman appoint a committee of five to report at the next meeting of this Council on the question of the Education of the Negroes and Indians, and make recommendation as regards the appointment of a special committee for a more thorough consideration of the subject.

President Tarbell appointed the following as such committee:

F. Louis Soldan, St. Louis, Mo., Chairman.

Oscar H. Cooper, Galveston, Texas.

J. H. Phillips, Birmingham, Ala.

Euler B. Smith, Athens, Ga.

W. H. Bartholomew, Louisville, Ky.

The report of the Transportation Committee being called for, the committee asked further time in order to confer with railroad officials relative to rates. This request was granted and on motion of Mr. Gilbert the committee was continued.

The Committee on Membership of the Council reported as follows:

To the National Council;

The Committee on Memberships of the Council submit the following report;

It is found that the following vacancies exist:—

Terms expiring in 1896.

John T. Buchanan, H. S. Tarbell, E. W. Coy, Ellen S. Sabin, John W. Cook.

Membership lapsing according to the constitution by absence from the meeting of the Council for two successive years:—C. W. Woodward, E. E. White, S. H. Peabody.

The committee would nominate:

C. M. Jordan, to succeed John T. Buchanan; term to expire 1902.

H. S. Tarbell, to succeed himself; term to expire 1902.

E. W. Coy, to succeed himself; term to expire 1902.

Edward R. Shaw, to succeed Ellen S. Sabin, term to expire 1902.

John W. Cook, to succeed himself; term to expire 1902.

Elmer E. Brown, to succeed C. W. Woodward; term to expire 1897.

James H. Van Sickle, to succeed E. E. White; term to expire 1898.

John Dewey, to succeed S. H. Peabody; term to expire 1899.

Respectfully submitted,

C. C. Rounds,

B. A. Hinsdale,

C. B. Gilbert.

The report was adopted and the new members declared elected.

President Tarbell expressed special appreciation of the work of the members of the Council who were present at its opening session and whose attendance and attention had been constant throughout the entire sessions.

BETTIE A. DUTTON, Secretary.

PAPERS AND DISCUSSIONS.

*REPORT OF THE COMMITTEE ON MORAL EDUCATION
—MORAL INSTRUCTION IN ELEMENTARY SCHOOLS.*

BY EMERSON E. WHITE, COLUMBUS, OHIO, CHAIRMAN.

The vital function of school discipline is the training of the pupil in habits of self-control and self-direction, that is, in self-conduct; and to this end the school must be made, as the French programme puts it, "an apprenticeship in right living." But the essential principle in self-conduct is self-determination, *i. e.*, the soul's determination of its deed, by the free exercise of its inherent power of choice and volition. Indeed, the existence of a moral act depends on the soul's freedom in willing. When an act is determined or necessitated by external conditions over which the soul has no control, such act has no moral quality. The ability not to put forth an act is essential to responsibility, and a sense of freedom is essential to a sense of responsibility. In the absence of freedom in choice and volition there can be no moral action.

We thus reach the important fact that moral training is essentially will training—the training of the will to act habitually in free obedience to duty. But the will acts in view of motives, and the moral character of an act depends primarily on the motives which are back of it. But motives are not external forces which dominate the will and thus necessitate the deed. There is no more fundamental error in philosophy than the assumption that human action is determined by motives over which the soul has no control—motives floating in a stream of external causation. This assumption makes moral training impossible.

The soul creates for itself the motives which occasion its action. They are subjective, not external. This is seen in the fact that motives are feelings, the strongest of the motive feelings being the desires. But desires arise in the soul in response to intellectual conceptions, and these conceptions are under the direction of the will. By its free action it may divert the mind from that which occasions a certain desire and direct its attention to that which awakens a different, even an opposite desire. A malevolent feeling, for example, may be supplanted by a benevolent one by directing the mind to those acts and qualities in the being disliked, which awaken admiration and

love. This play of feeling is one of the most obvious facts of our conscious life. Emotions, affections, and desires are awakened by presenting to the mind those objects which occasion them, and this may be done by voluntary action. The soul thus becomes the occasioner of the emotions which are back of its deeds. It controls its desires by controlling the intellectual conceptions that occasion them; and it controls the deed by controlling, not only the desire, but its response to it. The will frees itself from bondage to low and selfish desires and interests by forming for itself high and worthy motives, and then conforming action thereto by its free choice. This view makes moral training possible.

The foregoing facts show that the question of motives, or incentives, is fundamental in pedagogy. The moral efficiency of school training depends primarily on the character of the motives by which its ends are attained. It is not enough that external "right living" be secured, but this must flow from right feelings, from high and worthy motives. In all this training there must be present the sense of freedom and consequent responsibility. The pupil must never be looked upon as a machine running in grooves formed by heredity and environment. The school must at all times appeal to the pupil as a free moral being, and as such responsible for his conduct, and this freedom must be to the teacher a reality, not an illusion.

In the light of these principles the importance of instruction as an element of moral training is evident. It is not enough that the pupil's conduct be right externally, but such conduct must be inspired by right motives; and, to this end, the pupil must be able to set up such motives for himself. The three guiding facts here are (1) knowledge awakens feeling; (2) feeling solicits the will; and (3) the will determines conduct. It is thus seen that conduct when free is reached by knowledge through feeling; and this involves instruction.

These facts also indicate the nature of such instruction in the elementary school.

1. The first end or purpose of moral instruction is to awaken right feelings—to touch the heart. It must awaken a love for what is good and true, and this affection must supplant low and selfish desires. It is not enough that the pupil has an interest in virtue. This interest must pass over into an abiding affection. Human experience shows that mere interest is a transient feeling. What interests the child may have little interest to the youth, and what interests the youth may have no interest to the adult. Even sudden changes in interest is a common experience. Indeed, interest seems to be more a condition than an end of instruction. It is abiding only when it passes into a higher motive or principle.

2. The second end of moral instruction is to quicken the conscience—to make acute the moral sense. The conscience, like every other power of the soul, is developed by its appropriate activity. A degree of this activity of the conscience may be secured by right instruction.

3. The third end of moral instruction is to train the moral judgment—to develop clear moral ideas. Human conduct is often, if not usually, complex, and it is not always easy to discern its efficient motive, and thus determine its rightness or wrongness. This is not only true of past conduct, but present duty is not always simple and clear, even when not obscured by passions or prejudices, or selfishness. No exercise in ethical training is more fruitful than the careful study of conduct presented concretely, or in story, biography, etc. Such study not only sharpens the moral sense, but it trains the moral judgment, just as the observing of colored objects develops the power to discriminate colors.

A common principle underlies the three ends of moral instruction, as stated above. Right feelings are awakened, the conscience quickened, and the moral judgment best trained by means of concrete examples. This principle indicates that elementary instruction in conduct should begin with the concrete, not the abstract. The primary law of intellectual training, "the concrete before the abstract," is also the law of moral instruction in elementary schools. The fact that all primary ideas must be taught objectively is no truer in teaching natural science than in teaching duty. The primary facts of science may be early acquired by observation, but science proper must be deferred until a later period in the child's mental growth—the so-called scientific phase. The same is true in moral instruction. The feelings, the conscience, and the moral judgment are best reached by concrete examples. The science of ethics belongs to the higher grades of school—the high school and the college. It is true that some didactic instruction in morals may be wisely given a child, but such instruction should be exceptional, not the general practice. Some one has said that a universal desire indicates a universal need. The universal interest of children in stories that picture human conduct shows that such stories meet a universal need of childhood. Besides, truth thus presented not only touches the child's moral nature, but it falls more readily within his comprehension.

"Truth embodied in a tale
Shall enter in at lowly doors."

It may also be noted that the effectiveness of examples is increased by their beautiful expression. The æsthetic emotions support and strengthen the ethical feeling. This fact gives the classic story an

advantage over the commonplace incident, and it also explains the charm of noble deeds when beautifully told in poem or song.

But I must leave to other members of the committee the discussion of the materials to be used in moral instruction. I can only add that the virtues thus to be taught are many and important, and that instruction in duty should have a recognized place in the programme of all elementary schools. The central duty of the school is effective and vital moral training.

THE ETHICAL VALUE OF HISTORY IN ELEMENTARY SCHOOLS.

BY J. F. MILLSPAUGH, SALT LAKE CITY, UTAH.

The knowledge of what men and nations have chosen to do under the force of circumstances in which they have found themselves, and an intelligent comprehension of the results for good or evil which have followed such choices must constitute for successive generations the most valuable instruction in conduct which it is possible to obtain. But such intelligent comprehension of the relations between results and their causes is a necessary condition of securing from history any really serviceable result, either for nations or for individuals. The fact that the first Charles met his death at the hands of his own people, and the other fact that the patriots were without shelter and clothing and food at Valley Forge, as they stand alone, are pieces of information absolutely valueless for guidance or inspiration either to Englishmen or Americans. But when these bare statements are preceded or followed by others necessary to a full comprehension of the respective cases, the hereditary love of liberty is quickened in the hearts of Englishmen, and patriotic emotions are stirred in the breasts of Americans.

This illustration furnishes a hint of what could easily be shown if it were not already generally admitted, namely, that historical narrative possesses guidance value in relation to moral conduct only as it presents side by side with the fact or event the human considerations which led to it, and the application of the lesson to self or to present condition. "All history," says Emerson, "is subjective. Every mind must know the whole lesson for itself. What it does not see, what it does not live, it will not know." I repeat then, that, interpreted thus in the light of cause and effect by persons mature enough to understand its lessons and take them to heart, history furnishes moral instruction almost incomparably valuable.

But how is it with the child during the first four years of his school life? Is he able to discover and properly estimate the relations between the voluntary act, constituting the ultimate cause of an event, and the effects which result? for only as he, in some degree, consciously apprehends these relations and appreciates their teaching will the recorded facts have for him ethical value.

The child learns what things are right and what things are wrong in his own home. That, for the time, is his little world, in which he experiences the rewards of good conduct and the pains of evil doing. Almost his only troubles, and his joys, as well, are those which grow out of his association with his brothers and sisters; and as he becomes older the circle of contact is merely widened to include his playmates of the neighborhood. Thus life to the little child is simply a round of association and contact with persons, and apart from them his interests are few and trivial. Dolls and pets are christened with the names of persons and made to repeat all the moral experiences, enjoy all the commendation, and suffer all the disapprobation which have fallen to the lot of the little master or mistress. He is fond of stories, both of truth and fiction; but the stories must always be about people. For him stories of nature, even, possess little charm, unless he thinks of the inanimate objects described as clothed with the attributes of personality. The great story-tellers of childhood, like Andersen and brothers Grimm, have always well understood this, and all their bears and lions, their eagles and swans, their pine trees, and daisies, use the thoughts and the language of children.

From these considerations I believe it will appear that history has value for children in proportion only as it falls within the circle of their interests and corresponds with their experiences.

We are, then, interested to inquire concerning the range of historical subjects that are capable of thus awakening the interest of the child, and hence of arousing his moral judgment. It is hardly necessary to remark that this range is a very limited one. Motives which determine the acts of nations differ in many respects from those which govern individuals. The relations existing between man and man require no such nicety of adjustment and their maintenance is endangered by no such merely technical considerations as those which determine the peace of nations. Reasons which from the point of view of government may, in time of war, justify the detention, imprisonment, or execution of persons of irreproachable private character, may, at the same time, be utterly indefensible from the standpoint of individuals. In like manner the property of a hostile nation may be seized or destroyed, territory may be invaded, and cities may be bombarded regardless of the fate of the people residing in them.

The rightness or wrongness of such acts can only be determined by appeals to the moral code of nations. But of this children can have no knowledge. As has been shown, their experiences have been with individuals only, and the opportunities for consideration of motives which affect masses of people have been few. From the main events of history, then, those in which considerations affecting large aggregates of people or states predominate, the child can extract but few ideas capable of serving him for moral guidance.

The same reasoning which leads us to believe that the impersonal events of history are of little ethical value would also make it probable that this study, in proportion as the individual, personal element predominates, is capable of exerting over children a strong moral influence. In the stories and myths of the nursery, the child finds illustration of his own experiences, and every such illustration connects with it inseparably a demand for moral approval or disapproval. As the range of contact and association with his fellows enlarges he gathers from the stories of national heroes more perfect examples of the operation of motives similar to those which he himself has experienced. Not only does he find in such stories the exemplification of his own observations and experiences, but in the historic perspective produced by the remoteness of time and place there is less confusion of circumstances, emotion is tempered, motives are better defined, and hence ethical judgments are more easily formed and more reliable. Through the examples brought before the child the strength of volition is also increased. What he hears or reads of the desires, the temptations, the resolves, the struggles, the sacrifices, and the moral victories and defeats of the men and women, and especially of the youth, of history, tends strongly to fortify him against vain allurements and to reinforce his own resolution. Thus his own experiences of every day, which of themselves might serve to impress no valuable lesson, are emphasized by their larger application in the careers of those whose acts have made them immortal. It is not so much history, then—with its relations of time and place and circumstance, its search for ultimate causes and remote effects—as biography that is capable of calling forth the moral judgment of children and stimulating resolution. True as it is of all of us, it is especially true of children, that abstract principles of conduct do not strongly affect the will; but the story of what others have done enforces comparisons with self and arouses to imitation and emulation.

— I do not need to say that between children of the primary and those of the grammar school there is no sharp line of demarcation. Progressively dependence upon the concrete diminishes and ability to deal with abstract and general ideas increases from infancy to maturity.

If in early primary grades the child's attention cannot be attracted by the recital of events entirely disconnected with his own experiences, in grammar grades the condition is not essentially different; but in the latter the range of experiences has been so enlarged and the ability to analyze and combine facts so increased as to render the larger facts and generalizations of history more intelligible. Similarly, if in his first years of school life the pupil is mainly attracted by accounts of the adventures and fortunes of individuals, in the higher grades of the elementary school the personal element has lost none of its charms for him; but his own enlarged perception and insight enable him to discover the hand of man where before it was not visible, and to trace human agency in results which before he had regarded as the product of chance. Where before the child could see himself pictured in the individual only, could trace correspondences between his own motives, resolutions, and acts, and those of some other distinct personality, now in some degree he is able to see himself in the race of men and to measure his own powers and limitations by the acts of nations.

In grammar grades, therefore, while the function of biography in moral instruction is by no means diminished, the ability of pupils to read the ethical lessons of history in its larger sense is increased.

The extent to which the pupil's instruction in history will quicken moral perception and strengthen moral judgment will depend very largely upon the development of these qualities in the teacher. Under thoughtless, impulsive, and, therefore, vicious teaching, the study has the same capacity for harm as under right instruction it has for good. The habit of discussing the moral issues of events flipantly; of reaching conclusions hastily and carelessly; and, worse than all, of searching for historic examples of evil and evil deeds to beget a misanthropic and nihilistic spirit in the pupil—this habit, by no means uncommon, results in a most dangerous perversion of the power of history. On the other hand, when pupils are taught to suspend judgment until by careful, conscientious study, the circumstances surrounding the facts of history have been examined; when events and conditions are studied in comparison or contrast with cases of recent occurrence; when example and incident, the rewards of virtue and the penalties of evil doing, are all employed to stimulate a sense of right and duty and love of country and humanity—then the instruction becomes a most efficient means of developing moral judgment, of furnishing guidance for conduct, and of begetting healthful emotion, which, as Dr. Klemm suggests, is the right soil for healthful volition.

The motive power of history has its source in example. In case of

the young, especially, this operates as a forceful constraint. In historical biography, then, rather than in the story of impersonal events, we are to seek for the most potent influences tending to stimulate children and youth to right conduct.

THE INCIDENTAL METHOD OF MORAL INSTRUCTION.

BY MISS LUCIA STICKNEY, CINCINNATI, OHIO.

The author of the best book on the subject of moral instruction says that "the school should not be to the pupil an intellectual drill ground, but a second home." And we learn from the editor's preface of the same book that "habits without ideas do not deserve the title of moral in the best sense." It has come to be pretty well established that the moral influence of the school must be purposed rather than incidental, and that system and method are as desirable in giving a rational underpinning for moral as for intellectual practice.

We are all right in the convention, but from the school there still comes the Macedonian cry. The makers of the course of study and the program still find no room for definite moral work. The monthly teachers' meeting has all it can do to look after delinquents and send home reports of failures, and the normal graduates leave the training school with a well-filled notebook, it is true, but with a more definite vision of the sharpened slate pencil and the forming in line than "of the means of creating in children those habits which are essential to the safe guarding and unfolding of their moral life." Psychology is a distinctive feature of the normal school, but ethics and the plan and purpose of character building is not a prevailing ideal of normal work. The school still goes on with the clockwork method, forgetting the individual insight side of the question, and diligently striving to bring to perfection the side of the mechanical virtues. In every corner of the curriculum we have system. The grammatical analysis of an ordinary sentence requires a page of foolscap and a diligent half-hour to get it on paper, and when done it is so exact in design and proportion as to look like an architectural drawing of an expert. Everything shapes itself to the coming examination. The answer is spaced and arranged and the important words underscored to suit the convenience and eyesight of the teacher, and we should be well pleased with the result if, with this perfection of execution, there were not too often a deficiency in the application of principles and a lack of right ideas.

The point to be made in this report is that with all this strict attention to details, which is in itself admirable and valuable, unless in the *training* of the *teacher* and the work of the school there is incorporated a regular plan and method of developing moral ideas and principles, that which is most valuable must be crowded out; that while with the work in the hands of the free and high-souled teacher the best things will be said and done, yet with many too little will be accomplished, and with all the result will be too indefinite. The moral and religious idea forms the very basis of structure in the kindergarten; why should the training work for the elementary and secondary school lose sight of that idea? If in reviewing the work of moral instruction as it is being done in the incidental way, one says that it is already good or excellent, we answer that we wish to bring it to perfection.

There is, it is true, in our present scheme a place for moral lessons everywhere. The lesson of the higher life makes eloquent and interesting the study of the development of the lowest organisms into one with the simplest locomotive organ, and the lesson goes on with each new step of development. The teachers of botany and zoology are given the opportunity to bring in with this exquisite object lesson of struggle for the higher life of self, the illustration of the "life-giving principle of society, the struggle for the life of others."

The Herbartians, in discussing relative values, "harp upon *history and literature* because they contain the rich moral and social culture, influences which they wish to see redeveloped in every child." We have in hand a sort of composition exercise in which the pupils in the third year give a review of the things they have found good and helpful in their course of study. They bring from Gray and Pope and Wordsworth, from Cowper, George Sand and Virgil and Goldsmith, and always from their beloved Joan of Arc, the lessons of fortitude, patience, courage and self-sacrifice, of sympathy, compassion and piety, and they testify that through their nature studies they "have come to appreciate the works of God." Yet it is a fact of some significance that twenty out of fifty of these pupils confess, some with seeming regret, that they do not recall any lesson in their course of study which has been of practical benefit, and the suggestion is made in at least one instance that "morals should be considered as a science by itself." The young ladies themselves are a better evidence of the moral value of their course of study than their own statements, the composite tone and color of which are indirect and impersonal.

It is said in a recent school journal that "the study of literature gives mainly exalted pictures but imperfectly connected in the pupil's mind with the planning of his own everyday life." We come to them

always in this incidental method, from the objective side, and in their moral maxims and literary gems we give them handfuls of pearls with nothing to string them on. We may expect that the recitation of a heroic act in a history lesson, especially if the recitation is to be marked, will have as little practical effect upon the student as did a moving scene upon the Russian lady who wept at the theater while her coachman was freezing to death outside. It would seem that at the risk of trying to teach too many things, we should seek to find for those who have derived from their history and literature a goodly store of objective moral illustrations some work which may deal with moral principles from a more subjective point of view.

Since the last meeting of the Council there has come to hand a little book which seems to have grown from a conviction of the author that the human mind has qualities that would interest the average person, whether young or old. His book, which bears the title "Psychology and Psychic Culture," makes eminently practical the lessons on the cultivation of the mental powers and is suggestive of ethical applications in every lesson. These lessons, the author says in his preface, in order to be most effective for self-improvement should be studied while the brain is still plastic, and hence earlier than has been customary hitherto.

The lessons, with their mirror-like illustrations, present to the pupil under the guise of a new science, himself as he is making himself. The physiology of habit and attention, the cure for mind wandering, the influence of the imagination on the heart, of thought culture on character, the development of the altruistic feeling by thought, of the æsthetic feeling by withdrawing the thought from self, the control of passionate emotion by the repression of its expression, the need of learning early how to be happy, and best of all the secret of will power, are all lessons so fascinating and so intensely practical, that we may believe that the fourth-year pupil who has been set to work upon them in his regular study hour will be as sure to go home and begin to reconstruct his brain paths, and tear down his castles in Spain, as was the first-year pupil, after his lesson on oxygen and carbon dioxide in the blood, to go home and open his window at night.

The story of the chivalry of the Black Prince who waited on his prisoners, the king and nobles of France, with his own hands arouses a noble sentiment in the heart of the boy student, and it is hardly likely that the teacher will care to cool his enthusiasm for the history lesson by dwelling on the fact that this chivalrous prince killed off the common people like sheep, or stole from them their crops, their animals, and their labor. Take up the same story under the head of accurate concepts, as we find it in this book, and the lesson that true nobility

considers the lowly born and humble finds its place in the boy's material for self-structure and is pigeon-holed and labeled for future use.

There may be some apostles of unconscious influence and the incidental method who still object to the pigeon-hole and label, but we believe that accurate concepts of honesty and honor, of *esprit de corps* and comradeship, are as appropriate topics for a school lesson as are those of base, rate, and percentage, or the three departments of United States Government, and we would at least suggest that the concepts of these cardinal virtues should be so well defined in the mind of the normal graduate as to get definite shape in the year's lessons, whether the boys and girls are in the first or the twelfth year of the school course.

Mr. Halleck's book on Psychology and Psychic Culture may be commended here without fear of suspicion that this report is made in the interests of the book company, and it is with just as little hesitation that we say that the book does not completely satisfy the pleader for a system of moral instruction. The author finds room for only a brief paragraph on conscience, and a corner of the chapter on emotions for the moral nature. The work is well done as far as it goes, but after this is done there is still need in the course of study for a simple theory about right and wrong, and a definition of duty which shall send home the lessons that have been already given. Principles of obligation should be formulated, which the boy and girl, whose moral consciousness has been quickened, will be ever ready to apply to new cases which may come to them in after life.

Doctors in council may forget, but schoolmasters never, that many pretty good and conscientious pupils keep for their convenience two standards of right, one to use in the school, the other out of it; and that we send our boys to the university prating of their conscience that will not allow them to enter a compact against cheating in examination, and still hugging the creed that what others do is nothing to them provided they keep themselves straight.

The advocates of incidental moral instruction may claim for their trophies the earnest and sweet girl graduates, but there are among these graduates those who will say that it never occurred to them to correct their habits of day dreaming or to discipline their will, until it came to them in their psychology lesson, and we have the testimony that ought to hold in court that a lesson on the Ten Commandments which sought to turn and make them over for everyday wear was the best of all the year. We do not find the class or the pupil that does not enjoy a straight moral talk, provided it does not reveal some by-end to be served. We know of one teacher who civilized a class

of forty roisterers by reading to them each morning a chapter from Professor Everett's "Ethics for Young People." Dr. White's "Materials for Moral Lessons" have been dealt out to others, already civilized, to their evident profit and satisfaction.

We believe that the best teachers will give the ethical lesson as often as the overcrowded class and programme and the examinations in technicalities will permit. We admit that the great part of character building is inherent in the general work of the school, but, that character may be better built, we believe that the normal graduate should be more thoroughly imbued with its plan and method, and we believe that whether our high school graduates go to the normal school, to the university, or out into the world they should take with them some well-defined principles which shall save them from moral asceticism, which shall enable them to form a just estimate of the claptrap of stage heroics, which shall give them everywhere a single standard of right, and above all shall incite them to keep well-defined and well honored, well molded and burnished, the God-given voice—the voice of God himself "that ever asserts right and ought in the realm of choices and intentions," the voice that we call conscience.

Elevate teaching by elevating the teacher. We are making teachers, throughout our school course, and we should keep up the process from the start.

DISCUSSION.

[REPORTED BY THE SECRETARY.]

MR. C. C. ROUNDS.—Among the ends to be sought in moral instruction in the elementary school, I would name, first, the development of a clear, spiritual perception, the perception of the inexorableness of the majesty of the moral law, and such an elevation of ideal of character that no temptation of selfish interests would lead one to violate his conscience by doing an unworthy act; and, second, such a cultivation of the moral judgment by the careful consideration of cases of conduct as would enable one to think more and more accurately along these lines, to tell more and more surely what is right and wrong in the conduct of life. The picture of the moral condition of these times as given by the daily press enforces the necessity for an awakening along this line. Granted that there is much of good which herein finds no mention; yet it remains true that the press but administers to the public demand in filling its columns with the daily record of the evil, and that any daily journal risks failure by refusing to administer to this depraved public taste. The studies ruling courses of instruction treat of laws, to be sure, but treat of these as the unvarying successions and relations of phenomena. I fear that an adequate conception of a spiritual universe has well-nigh died out in the minds of large masses of our people. To cultivate a higher spiritual consciousness is necessary if we would make sure of the American citizen of the twentieth century, and for this cultivation there is

no means so practicable and so sure as more careful attention to moral instruction in the elementary schools.

MR. CHARLES DE GARMO called attention to the prevailing disposition of the school to emphasize the purely individual or subjective phases of moral training, and urged that the objective or social phase should receive more attention. He said that many have what may be called a divided conscience, *i. e.*, they have one rule of morals for the home, but a different one for business or politics. People whose characters are of irreproachable integrity for private intercourse deliberately hoodwink and defraud the public in their business, or deliberately rob the community when entrusted with its affairs.

In reply to a question by Mr. Hinsdale, inquiring whether the causes for a divided conscience lie most in the individual or in the conditions under which the individual must work, Mr. De Garmo said that he thought that they lie largely in the external conditions, and that for this reason we must make our moral training of a more positive social character, showing how co-operation with others may change the environment in such a way that the need for a divided conscience will no longer exist. To a remark by Mr. Harris to the effect that this is a reason for laying emphasis upon the transcendental will, thus helping the person to defy the conditions under which business is done, Mr. De Garmo urged that though each age has its martyrs, whose blood is said to be the seed of the church, yet mankind as a whole has advanced because of changed conditions, so that if we wish to enable large numbers to live by a single code of morals we cannot do the things that will make it possible for them to live under other conditions than those offering the alternative of unmoral practices or ruin.

MR. B. A. HINSDALE:—It is but a platitude to say that the subject under discussion is one of great practical importance; however, it may be observed that only things of great value ever become platitudes. I am persuaded that what the great majority of the teachers of the country need, especially those in the elementary schools, is a more definite, specific, and practical discussion of the problem of moral training than we have ever had. These teachers hear much, and they read much, of the value of moral training; they listen to much exhortation as to their duty in that matter, but the difficulty that they encounter is this; they do not very clearly see just what they are called upon to do. The questions that trouble them are: What is the problem of moral training? What are the elements of morals? Where does moral training begin, and by what steps does it proceed? In my view these matters need to be discussed with a thoroughness that they have never yet received. For example, we have heard much this morning about the social will and the transcendental will. What is the social will? What is the transcendental will? What is the relation of the one will to the other, if we may speak of the will in the plural number? Still further, how is the social will to be trained? How the transcendental will?

Our friends who are saying so much about interest, are, no doubt, telling us some things that we very much need to hear, but when they attempt to iron out, or spread out, interest until it covers the whole ground that is proximate to action they are flying in the face of the dictionary and cutting loose from some facts and principles that are of the very greatest importance. At the same time the question is, How is the moral will to be trained? Is it to be trained merely by beaming on, to use an agricultural metaphor? This is another question that needs to receive more attention.

Once more; something has been said about the relation of moral theories to

energy of character and to life. There is an optimistic view of life, also a pessimistic one. What is the relation of either of these to life? It is thought that a pessimistic view would lead to indolence and inertness, and, no doubt, that is often the case; at the same time it cannot be denied that pessimists have often exhibited surprising energy of character. Fatalism—absolute, stark fatalism, is the core of the Mohammedan religion. The Mohammedan believes that the hour of his death is predetermined, and that when that hour comes he will die, no matter where he may be or what he may be doing. Still, we all know perfectly well that the early history of Mohammedan ideas was marked by an energy that has never been surpassed in the history of the world.

I am inclined to think that the effect of optimism or of pessimism upon life depends largely upon the tone of the character. Some people are enervated by optimistic views; they think everything will come out all right anyway. Other people are energized by such views. They see great opportunities, and seek to realize them. Again, some people are weakened by discouragement; others are strengthened by discouragement. We must, therefore, go from the intellectual theory to the character itself. How that is to be explained, or how it originates, is a question quite apart from the line of these remarks. Still, I do not wish to be understood as saying that whether a man is an optimist or pessimist is a matter of indifference. All I mean is that you cannot determine whether a man is an energetic character or not by simply taking account of his theory of the world, whether optimistic or pessimistic.

MR. JOHN E. BRADLEY said that the specific problem which every teacher meets is how to secure the moral training or the up-building of her pupils. It is not a question of theories of ethics, nor is it merely one of instruction, nor how best to impart it, but rather how to bring the will, the disposition, of the child into sympathy and harmony with that which is right and fitting in moral conduct. There is much moral instruction in elementary schools which reacts and does harm rather than good. What is needed is such prevailing influences in the schoolroom that the child shall grow into uprightness and integrity of character and life.

The child comes to the teacher in the primary grade as crude and uninformed morally as he is intellectually, often more so; for, while his wits have been sharpened by daily companionship and environment, he has not been brought into sympathy with the true ends of moral culture. How shall the childish impulses be gathered into right choices and habits of action? Certainly not by dogmatic instruction. And yet in thousands of schoolrooms all over the land this miracle is perpetually performed. Children, whose spontaneous interest is in things wholly apart from the ends of the school, often violently opposed to those ends—incarnate tempests and terrors among their companions, and even in their homes—such children are gradually transformed and brought into sympathy with the good order and self-restraint of the schoolroom, and its atmosphere of obedience and industry, through the molding power of a true teacher. But the work is gradual. The child's will must be aroused and made efficient in the direction of good things. A child who has thus been won to the co-operation and right choices of the school has been too often found to be utterly incapable of carrying his self-restraint and kind feelings with him to the playground or the home. But little by little this change of interest, this power of self-direction, the regard for what is good and true and right becomes embedded in the character. Right habits are established. Permanent preference is given to the good things; that which is evil or unseemly is rejected.

Thus moral training is necessarily slow—a work of time and patience and love. Moral instruction is of no value, except as it takes root and brings the will and the affections into harmony with that which is for the common good, and enables the child to become in daily life an expression of his best self.

MR. LARKIN DUNTON.—The beginning of moral education is knowledge of what should be done. This, even in the case of young children, should be followed by action. The motive at first may be affection or authority; and even if the motive is largely affection, it should be accompanied by the idea of necessity, so that practice in doing the right will be early established. Many people, in much of their conduct, never go beyond this stage; and if habits of right action are fully established pretty good citizens may result.

But, later, actions should be revealed to children as right and wrong. They should be instructed in their duty to themselves, their fellows, and to God; and the ground of duty should be clearly shown. Their necessary dependence upon others and the consequent duty to contribute to the general good should be made clear, as well as the specific effects of particular actions. So, too, children should be taught the possibility of improvement of self through personal effort. It should be made clear that one's ultimate power of doing good to others and of personal happiness depends upon the child himself, so that self-improvement will be felt as a duty.

One of the commonest faults in moral education, in my opinion, is the neglect of a constant appeal to the conscience. Many educators, teachers as well as parents, act as though they believed children had not even the germ of a conscience. An appeal to duty is always accompanied by an appeal to self-interest. It is too often said: "If you do right, you will be happy," as though the sense of duty was not reason enough for action.

The end of moral education is the habit of subordinating all motives to the sense of duty, and of yielding immediate obedience to its promptings. To secure this end, right action must be secured, at all events; knowledge of right must be clear, and a habit of right action must be formed by acting right.

*REPORT OF THE COMMITTEE ON TECHNOLOGICAL
EDUCATION—THE PREPARATION OF MANUAL
AND INDUSTRIAL TRAINING TEACHERS A
FUNCTION OF THE TECHNICAL SCHOOL.*

BY CHARLES H. KEYES, PASADENA, CAL.

Manual training, whether viewed as a subject or method of instruction, is yet in its infancy. It has established its right to a place in our educational system, and shown that its general introduction is but a question of time. We have reached the period when a new bearing of the subject confronts us. For some decades consideration of the question has divided us along the lines of advocacy or opposition, until at last the truth has triumphed, and justification is accomplished.

This very work, however, has brought about a keen appreciation of the elements of weakness in the new method of education. We long ago learned that the only way to elevate teaching was to elevate the teacher; that the central school problem was simply the teacher problem. Hence our training schools, normal schools, and departments of pedagogy. With the introduction of every new subject into the school curriculum we have had to learn this lesson anew. Drawing never amounted to much until trained drawing teachers took the place of mere artists. Music was never what we hoped it might be until music teachers took the place of mere singers. So manual training will continually fall short of realizing the desired results until trained teachers take the place of merely skilled artisans or inexperienced engineers.

The teacher demanded for this service should be, first of all, a teacher, and not an artisan or an engineer. His specialty should be, first of all, education, and not some branch of mechanical art.

To be a teacher is to be possessed of such moral, physical and intellectual health that all one's contacts with youth make for uplift. To be a teacher is to be possessed of such culture and power as shall inspire the young to desire strength and cultivation for themselves. To be a teacher is to possess such mastery of the subject of instruction, such art in imparting knowledge, as to make certain that youth shall transform that knowledge into the wisdom which alone is power. To be a teacher is to know books well and boys better.

But to be a manual training teacher who shall truly advance the cause of industrial education is to be all this and something more. To the equipment for general instruction must be added technical art; mastery of tools, processes, and materials, through contact with which shall be developed conscious, skillful energy, through experience with which every other faculty shall be reduced to the dominance of the will.

The manual training teacher, too, needs rather more of general culture than does the teacher of the grammar school or the high school. This is necessary for the removal of the impression which is to-day the chief hindrance to the general introduction of manual training into our scheme of popular education. There is a popular impression that manual training is teaching boys carpentry, blacksmithing, etc.; that this work must be done by men who are simply carpenters and blacksmiths; that such men are usually comparatively illiterate; that their contacts do not, accordingly, make for the refinements of higher living. There is a belief that a man who has education, art, and culture enough to teach anything else would not teach tool work. The boy goes to his first meeting with his teacher of

English, mathematics, or history, expecting a man of some culture. He is disappointed if he finds it not. On the other hand, he goes to the sloyd room, forging room, or turning room expecting to meet a man of limited education and little culture. He is surprised if he finds there a cultivated, scholarly gentleman. When such surprises become the rule, there will be no opposition to manual training, and the public will recognize manual training teachers as belonging to the very highest rank of our profession. The desire for their services will simply be the desire for the best in education. The only way friends of manual training can so improve and elevate that work as to make it sought for by the best people in every community is to labor for the improvement and elevation of the manual training teacher, with especial emphasis on the man and the training.

The manual training teacher, too, needs rather more of the teaching art and the philosophic training which alone can give the power to study human development accurately, because his must, in the nature of things, be largely individual work. He is compelled to address himself to the true problem. He needs to know books well, tools better, and boys best.

At this juncture it becomes necessary to notice the present sources of supply for manual training teachers. At the outset we are confronted with the fact that there are but five institutions in America that offer courses for the special and professional preparation of manual training teachers, and in at least three of these no adequate literary or academic requisition for admission is made. Fortunately the classes have, heretofore, been small, and there is an evident tendency to require for graduation as manual training teachers, in the future, as generous professional training, and at least as much academic training as is required for graduation from full courses of the best normal schools. Omitting, then, these schools, which as yet furnish but a meager proportion of the whole number of manual training teachers, we find but two sources of supply—the technical colleges and the manual training schools themselves. The former give a training involving less of culture than a college course, but representing, perhaps, almost an equivalent in power. Their graduates, like those of other colleges, are about as well prepared to successfully practice law or medicine or preach the gospel, as to teach. They can learn to teach by teaching; but even in this work of getting one's professional training by practicing on innocent classes of youth they are seriously handicapped by the fact that the point of view of the technical school is totally different from that of the training school. The aim of the former is strictly economic, and that of the latter as strictly educational. The former looks at the joint, the model, the

piece of work; the latter at the boy, and the reflex influence of the exercise upon him. The standard of excellence for the technical school is perfection of the wood or metal model, and that attained in the shortest possible time. The experienced manual training school teacher, on the other hand, knows that many a mechanically perfect model, expeditiously turned out, means less development, less training, than some imperfect ones upon which much more time may have been spent. The character and sequence of exercises and models are entirely changed in the training school. In the technical college the exercises seek the quickest possible mastery of the tools, machines, and processes. In the training school the model must furnish incentive and mental development. The young graduate of the technical college must then, when he enters the manual training school as teacher, almost totally abandon the aims and methods of his alma mater. To make himself the needed teacher of manual training, he should proceed to supplement his general training by a systematic study of physiological psychology, history of education, and methods of teaching. This will enable him to develop principles which will determine for him correct practice. Without this study he must simply teach by authority, adopting the methods of others or teaching as he himself was taught.

The graduates of the manual training high schools, who, in turn, take places as teachers in such schools, labor under an additional disadvantage. They are not only without professional training for the work of teaching, but have had from three to four years less academic culture than the graduates of technical colleges. The line of study necessary to make a professional teacher out of a technical-school graduate must, for the manual-school graduate, be strongly re-inforced to make up for lack of general education. He possesses one definite advantage over the technical-school graduate, in that he already has the method of the training school.

With all these limitations upon special preparation of manual training school teachers, we have, nevertheless, a large proportion of skilled instructors who have, through private study, as above indicated, come to be artists in their profession. These are re-inforced in number by those who have had the training of normal school and college, and who, after years of experience, have taken special courses to gain technical skill.

For the future some things seem definitely settled. First, the teacher of elementary manual training must also be available as the teacher of the common school. For the mass of scholars no special teacher of manual training will be possible. This being the case, the institutions which provide us with the great body of trained teachers

for the district school, to wit, our normal schools, should provide instruction in elementary manual training. This should include, at least, work in sloyd, free-hand drawing, clay modeling, and wood carving.

The special teachers and supervisors of manual training in other elementary, secondary, and normal schools, as well as the teachers of manual training schools, must get their training in specialized institutions. These institutions should furnish opportunity for the comparative study of the various forms of manual training. This is necessary to prevent narrowness. The teacher whose only contact is with the so-called Russian manual training is sure to be known by the flippancy with which he disposes of all other systems, and the cynicism with which he refers to sloyd as an infantile indulgence in whittling and sandpapering small blocks. The teacher whose only experience has been with the Swedish system is apt to think of wood sloyd as the only valuable educational manual training yet developed. He is sure that the modified Russian system, so commonly in use in American manual training high schools, is all wrong. All this is obviated when the training institution offers the aspiring manual training teacher, as his daily educational clinic, successfully operated classes in the various forms of elementary and secondary manual training. If these can be contrasted with the workings of the technical institute, so much the better.

Such opportunity for the preparation of teachers must be provided before the best manual training will come to be a common thing. Then we will cease to have illiterate manual teachers. Then lack of ordinary culture and scholarship will be as intolerable in a teacher of cooking, or sewing, or drawing, or forging, as in a teacher of history, or science, or literature. Then lack of professional training will be as impossible in the teacher in charge of woodshop, machine shop, or carving room, as in the physician or the lawyer.

We must remember that, no matter what the subject of instruction, the teacher is but giving to his pupils the best that is in himself. No matter how infinite the literature or how profound the science, we are simply giving our best selves to the youth who come in contact with us. The humbler the medium of that giving, the more the necessity for the greatness of the gift. The teacher of forging or sloyd needs more to be good, and great, and wise, than does the teacher of history. He need not fear the magnifying of his calling; he cannot have too much respect for himself or for the teaching art.

In fine, the technical colleges should undertake this training as one of its functions for five reasons:

1. Such institutions have already approximately the equipment

• and the experience with which this work should be done. But little addition needs to be made to the shops, tools, and other appliances of the technical college to enable it to furnish such instruction. It is little more than a change of method and point of view that is required.

2. No other institutions can even begin to do this work in any broad way without an investment involving many thousands of dollars. This alone will indefinitely delay, if not permanently postpone, the inauguration of such courses in other institutions.

3. The graduates of the technical colleges, in large numbers, do and will continue to seek and secure employment as manual training teachers. The number needed for such service is increasing year by year. This branch of the profession, as heretofore indicated, needs professional training. This condition demands such training courses for this body of workers.

4. The introduction of such courses in the college of technology will react healthfully upon the work done in their shops, draughting rooms, and laboratories for the training engineers. The instruction in the general departments cannot fail to be stimulated by such juxtaposition. Just as the establishment and maintenance of a live department of pedagogy in a university results in a revival of true education in all departments not permanently fossilized, so will the acceptance of this new responsibility by the institutes of technology improve their efficiency in traditional directions.

5. Since the ranks of manual training teachers are being more liberally recruited from the body of technical-school graduates than from any other source, and, since the success of every new movement in manual training contributes directly to the spread of this method of education, the introduction and maintenance of such courses in the technical colleges will be a most potent move toward compassing a desired end. Supply of anything good and useful always creates its own demand. Such supply of professionally equipped teachers of manual training will not only result in the more general introduction of manual training in our cities and towns, but it will thereby divert from the already crowded engineering walks a body of talent sadly needed in the service of education.

DISCUSSION.

[Reported by the Secretary.]

Mr. GEORGE T. FAIRCHILD of Kansas said that the training of teachers in the line of work indicated is one of the most difficult problems, and referred to a skeptical sentiment which had formerly prevailed as to the value of the development along lines of special industry. Technical schools must develop ingenuity in the students themselves as to the methods of meeting the demand for living, for the betterment of all around them, development of energy, life, thought—in short, of a larger life.

The good man, the man who studies his pupils, gets best work from his pupils. Every teacher in this line must become "a teacher of teachers," as he realizes the broadening of the world's thought.

The specialist needs especially to remember that he is constructing the methods by which others shall work; and the question must ever in his mind be, "How shall I reach this life given me to develop?"

Mr. SHÉLDON of Massachusetts asked the question, "Is there that in the manual training school which has in it real disciplinary power and worth, and how do the results of its courses compare with those of other courses of study?"

Mr. FAIRCHILD replied, "The laboratory, the thinking-shop, is prime as a means of growth; and graduates from the technical schools compare well with those of any other schools in all that makes for manhood."

Mr. ROUNDS, in response to the question concerning results, referred to recent testimony of Professor Dolbear with reference to science teaching, in which Professor Dolbear had stated that the teaching of science as done in schools does not lead to scientific methods of thought.

Mr. HARRIS, referring also to Professor Dolbear, stated that science as taught in the schools makes for power.

Mr. S. G. WILLIAMS, of Cornell University, remarked that he had read with some care the report which was under discussion, and that it was a plea for the preparation of a better class of teachers for the manual and technical work so widely introduced in schools of every grade, coupled with the suggestion that the technical colleges should undertake this pedagogic work as a legitimate part of their duties. With the desire expressed in this report, that the manual training teachers should be gentlemen, men of good, all-around culture, as well as skillful artisans, the speaker wholly agreed. If manual training is to have a place in our schools, it should certainly be as well taught as any other branch, and by as superior a class of persons. He had for some years been wont to divide school subjects into five groups, and to insist that all should have their proper proportionate amount of time assigned them in school programmes. In these five groups, including languages, mathematics, science and history, the manual training should be included in a group whose function is to train the physical capabilities and develop taste, ranking with writing, singing, drawing, and modeling. It seems obvious, therefore, that the manual teacher should be a man of such aesthetic culture that he may develop and encourage the artistic capabilities of his pupil, and that he should be able duly to correlate his work of the hand

with any of the school subjects that may be illuminated thereby. Such teaching of the manual capabilities demands a man of liberal culture, to which manual dexterity has been added, and the report of the committee urges this view with great force.

The question was asked whether any educational results other than mere physical efficiency should be expected from manual training. To this the speaker replied that he believed it to be highly important in the training of the will. The best and most efficient means within the reach of the schools for training the will is through the control gradually gained by the will over bodily movements in school exercises, in sports, in athletic contests where many must co-operate to a common end, and in tasteful manual work. A useful preparation may thereby be made for that enfranchisement of the will wherein man takes supreme command of himself in every function of life, and makes his will the able and conscious ally of duty.

To a question of Mr. Barringer as to what kind and order of manual work should be undertaken in schools generally, the speaker remarked that he did not feel qualified to advise on that point, but would leave it to the other members of the Council who had given it attention. He was glad, however, to endorse the positions of the report as valid and well-urged.

MR. BARRINGER asked, "Are there certain brain-tracts that can best be cultivated by the use of manual training?"

MR. SHELDON replied, "Cornell has recently shown considerable skill in exercises witnessing to the training of the will."

In reply to further questioning, Mr. Williams stated that about one-half of the athletes were above the average in scholarship, one-fourth maintained the general average and one-fourth fell below. In response to questions, Mr. Rounds related observations of the effect of sloyd in one of the Boston schools under a skilled teacher, as one of the effective means of discipline, and by request gave an account of the development and the results of manual training in the schools of France.

REPORT OF THE COMMITTEE ON HIGHER EDUCATION—THE HIGHER LIFE OF THE COLLEGE.

BY JOHN E. BRADLEY, JACKSONVILLE, ILL.

The transition from the home to the college marks a significant change in the life of a young man. Independence and self-direction must now replace parental care and wisdom. Habits and principles are now to be tested and settled. Prevailing tastes and preferences are to be revealed. Every power of mind and heart is given a new direction and a new vigor. A grave responsibility rests upon the college which thus receives a youth at so critical a period of his life, and substitutes its own molding influences and its inspirations for the love and watchfulness of the home.

No one will deny that this responsibility has been, in the main, well met. Tested by any method, the average young man or woman

in college is better and safer than the average young man or woman out of college. From the day she receives them, shy and homesick boys and girls, till she sends them forth, liberally educated men and women, the college exerts a beneficent influence upon her students.

Every one who is familiar with student life in the better class of American collegès will, without hesitation, affirm that higher standards and ideals prevail in them than are found in almost any other communities, and that these ideals are improved and more and more fully realized as students advance from class to class. Every good college succeeds in arousing new intellectual life, new interest, new convictions of right, new loyalty to the truth, among her students, from year to year. The highest class will often present a marked contrast to the lowest class in these respects.

But while all this, and much more, may be claimed for the college, the friends of higher education and of strong manhood have some reason to inquire whether the college wholly fills its place in our educational system, and whether the trend of its recent progress has been wholly in the right direction. The college has been, from the dawn of our history, so important a factor in our national life that we cannot too jealously guard and foster its growth. But the good work of yesterday will not atone for the mistakes or neglect of today. It must be as true in the future as it was in the days of Cotton Mather that the best thing that has been produced in this country is the American college.

All living institutions are subject to change. During the last twenty years the colleges have been largely transformed. Their standards of admission have been raised; their courses of study have been greatly extended; larger freedom has been granted in the choice of studies and in personal conduct; social fraternities and athletic and musical organizations have changed the prevailing interest; new methods of instruction and investigation have been introduced, and many other changes have occurred which affect the organic and social life of the college and influence the aims and ideals of its students. At no period have these changes been more rapid than at the present time. In the main they yield, no doubt, substantial progress and enrichment, especially in matters relating to the immediate aim of intellectual instruction. But the indirect and unconscious influence of the college life and atmosphere upon the minds and characters of its students has not always been fully estimated. No one will question the fundamental importance of the tastes, the habits of thought, the principles of conduct, the ambitions and prevailing purposes which these so largely help to form. They are the product principally of what has been called the higher life of the college. And as, among

men, that which pertains to them as husbands and fathers, as neighbors and friends and citizens, is often more significant than that which relates to their ordinary profession or employment, so the influence which the college indirectly exerts is often more important than the instruction which it specifically gives.

This report will consider the work of the college principally with reference to the higher elements of character, and will point out certain conditions of symmetrical growth which have sometimes been overlooked. It will first take a general survey of the work and aim of the college; the latter portion of the report will relate to certain unfavorable influences which often arise.

The true purpose of college training is power. New institutions with divers aims have arisen in recent years to meet new wants. But the one great need of the world today, as it was a generation ago, is trained and symmetrical manhood. How to live completely is the problem. As Spencer says: "Not how to live in the mere material sense only, but in the widest sense—the right ruling of conduct in all directions under all circumstances. To prepare us for complete living is the function which education has to discharge." The best education is the highest development of the individual in all his powers.

The college should yield, for each life which it helps to fashion, strength, culture and character. Its aim is not specialization or professional equipment, but well-rounded manhood.

1. The first requisite in a leader is strength. Weakness retreats to the rear; strength begets courage and confidence. It is the province of the college to train the thinkers and leaders in every community. Its graduates should be men and women to whom others may safely turn—upon whom they can rely. Clear and strong in intellectual grasp, quick to distinguish truth from error, able to solve the perplexing problems of life with ease and certainty, they should be an inspiration and a support to those about them. The college should be a place where young men and women will learn to apply themselves; where they will acquire habits of industry, of concentration, of earnest work; where intellect and purpose will grow strong by surmounting obstacles and pressing on to higher ends. Our youth gain this power of application very slowly; too many never gain it at all. The world is full of men who have no power of persistent effort. The college has often failed just at this point. It should not only inform the mind but also invigorate the will. "The backbone of an education," says Froude, "must always be the ability to do something." We have too many men that drift. We need more that can stem the tide. The student needs to learn the value of earnestness—of a great overmastering purpose; to hold steadily in view the end to be attained, and to patiently

labor for its accomplishment; to subordinate ease, and prejudice, and preference to the claims of justice and of duty. That training is best which, in the felicitous words of Mr. Depew, "enables a man to do difficult things easily and irksome things cheerfully."

The development of the will is intimately related to intellectual habits. Methods of instruction may en throne and they may enfeeble this power. They should help a student to overcome his dislike of work and his disposition to do things carelessly. He who has conquered difficulties once will more easily succeed a second time. Power developed and applied in one instance is available for another occasion. Self-reliance and self-control are prime requisites in a college training. The student must believe with Cicero that "more men are ennobled by study than by nature." If a college is to have alumni whom it will delight to own and honor, it must give them, while students, a course of study which will compel their respect. It must help them to find a purpose, and to throw heart and soul into it. No one can touch the lives of others until he has a positive life of his own. If college trained men are to be leaders in their respective communities, they must be men of earnest purpose—men of strength.

Nor should it be overlooked that strength of intellect and of will are at their best when they spring from a well-trained body. If enthusiasm for football and boating shall make the present generation bold and strong of will; if it shall give them hard muscles and a bounding pulse, we need not grieve over the wasted time and misdirected energy. No college can meet the educational requirements of the present day without a well-equipped gymnasium. Mental discipline must unite with systematic training of nerve and muscle if we would produce robust and wholesome manhood.

2. But intensity alone tends to narrowness. Strength of body, of intellect, or of will, does not in itself constitute a symmetrical manhood. The man of one idea may be impractical; he cannot be broad and catholic. Education must do more than train specialists. Who has not admired the skill while he has pitied the limitations of such men? Their concentration of interest disqualifies them for the broader aspects of life.

Principal Shairp says, in his "Culture and Religion," that "what the Romans expressed naturally by the word *humanitas*, we, less happily, try to express by the artificial word 'culture.'" The term is inexact, but it denotes more fully perhaps than any other single word a certain breadth of information and of interest which should characterize the liberally educated man. "Beware of the man of one book," says Montaigne. He who reads one book may be a hard man to

encounter; his precise and positive knowledge may be irresistible along its own line; but the interest and sympathy will be as narrow.

Napoleon appointed Laplace, the great mathematician, minister of finance. He failed. Napoleon said of him that he carried the spirit of the infinitesimal calculus into every affair of state. He could look at a subject from no other standpoint. Such a man may be an expert in his own department, as quick and sharp as a needle; but, like the needle, his keenness is the result of his narrowness. The college should yield an education which will broaden life by enlarging one's sympathies as well as his knowledge, preparing him for a generous appreciation of that which is best in every department of effort.

A vigorous mind must have its storing period. You can draw no water out of an empty cistern. In youth the capacity for the absorption of knowledge is enormous. Facts and ideas, apparently swallowed whole, are really cunningly stowed away in the mind, awaiting the use which will sooner or later be found for them. The office of the college is to direct this accumulation. Better that a young man should read too many books than too few. Better that his interest should flit from theme to theme than that he should train himself to apathy and indifference. Foster his intellectual cravings, and minister to them with the best which science and literature afford. The student can learn his own capacities and aptitudes only by experience. He must prove himself along various lines of study, and not merely in the one to which his boyish fancy may happen to impel him. He must study the humanities; learn the lessons of history; grasp the truth which science reveals. The college should help the student to catch the spirit of the great masters of thought, to enjoy their companionship, and to survey the events of our daily lives from their exalted standpoint. Its aims should be expressed in the graceful words of James Russell Lowell, spoken at the celebration of Harvard's two hundred and fiftieth anniversary: "Let it be our hope to make a gentleman of every youth who is put under our charge. Not a conventional gentleman, but a man of culture, a man of intellectual resource, a man of public spirit, a man of refinement; with that good taste which is the conscience of the mind, and that conscience which is the good taste of the soul."

3. The final requisite of a symmetrical manhood is character. Force and culture, strength and beauty, will fail of their highest realization if a worthy motive is lacking. By character we mean integrity, moral uprightness. We mean spiritual uplift—the reaching out of the soul towards God. We also mean that quality in a man which begets confidence and respect. It is related by Emerson that, whenever Lord Chatham spoke, those who listened felt that there was

something finer in the man than anything which he said, and additional weight was thereby given to every sentence which he uttered. The power of such men is in one sense latent. It is not consciously displayed and asserted, but it makes itself felt without effort, and often by unseen means.

It has been said that "the measure of character is the resistance of circumstances," but it is also the felicity of this power to create circumstances, or so to shape them that the crisis never comes, and the battle is won before it is visibly joined.

It is the work of the college to foster and ennoble this transcendent power. The college trains to self-reliance; it trains to integrity and genuineness. It teaches a student to be himself; to despise imitations and shams. It teaches him to investigate thoroughly; to be loyal to his convictions; to recognize and to obey the voice of duty. It teaches him that the government of oneself is the only true freedom, and that manly independence demands conscientious self-direction.

The best support of character is in habits formed under beneficent influences. Purposes and convictions need to be confirmed in outward conduct. In no other way can stability of character and permanent uprightness be secured.

We have had no abler student of college organization in this country than Mark Hopkins, for so many years the honored and beloved President of Williams College. In an address at the fiftieth anniversary of becoming President, he said: "A college should be so handled as to bear upon character without sectarianism. If a man is to be educated physically and intelligently because he has a physical and intelligent nature, why should he not be educated and trained morally and spiritually because he has a moral and spiritual nature? This broad conception of education has been that which has prevailed in this college in the past. If not personally recognized, it has pervaded its atmosphere, and has been an uplifting power. I trust it will continue to prevail. If not, the glory of the college will have departed. If this college shall drop down into a merely secular spirit, in the training of the lower parts of man's nature, so that it shall cease to be in sympathy with Him whose object is to train to a perfect character that world which is symbolized on the missionary monument, it will no longer be Williams College."

The highest manifestations of moral growth is the Christ-like spirit. College education falls short of its true end if the learner does not sit at the feet of the Great Teacher. Religion does not consist in sentiment, nor in emotion. It is an upward movement of the whole nature.

Therefore the college says to every youth: "Choose the best. Yield

your heart to the power of the truth. Ponder those aspects of it which will strengthen your hold upon unseen things. Pursue an education that will give you strength, broaden it that it may yield in you the graces of culture and kindly sympathies, and let it bring forth in your spirit and in your life the fruit of Christian character."

With this statement before us of what a symmetrical training should yield, let us now turn to consider the adaptation of the college to secure it.

1. We see how subordinate a place must be given to the mere accumulation of knowledge. Unquestionably the four years of a college course should yield goodly acquisitions of well-related facts. But these facts, and the study and research in which the student engages that he may obtain them, are merely instrumental to his own upbuilding. Whatever views we may hold concerning the educational value of different subjects, all will agree that it is less important *what* one studies than *how* he studies. The college should foster good intellectual habits, yielding the ability to acquire rapidly, to grapple vigorously with unwelcome tasks, to investigate patiently till a safe conclusion is reached. Especially should it stimulate the ambition of the student and fill his mind with high ideals. Hence the importance of the personal element in the relation of student and instructor. The trite saying that the teacher makes the school, applies with added emphasis to the college. More important than its libraries and its laboratories; more important than all its material equipment, are the manhood, the character, the ability of men who compose its corps of instruction. Your committee fear that, with improved facilities and increasing numbers, some colleges are losing sight of this great truth. The strength of the early American colleges was in their poverty—in that they were compelled to make up by good teaching and personal helpfulness for what seemed to be lacking in material equipment. But this lack enabled them to recognize the value of man rather than of things, and made them schools of character rather than of lower aims. No one will question the value of ample endowments; but more than one institution is illustrating the fact that money alone does not determine the worth of a college. The personal element is the principal factor. The living teacher is more important than the text-book or the apparatus which he uses. The student is influenced far more by the professor than by the subject which he teaches. Rev. Dr. Parkhurst says: "The one influence in my college life to which I owe more than to anything else was the personal pressure upon me of Professor Julius H. Seelye. While the books can teach, personality only can educate." Therefore in the selection of instructors the first test of fitness should not be attainments but manhood. It was not

Arnold the teacher, but Arnold the man, that formed the character of the Rugby graduate. If the tendency in college administration today is to emphasize scholarship in the choice of instructors, it is well. If there is a corresponding tendency to disregard other elements of fitness, especially the capacity to impress moral and social ideals, it is to be deplored. The college professor should be first of all a man, able to command the respect, and even the admiration of his students. He should be a model for them in his love of the truth, his scorn of meanness; in manly spirit and gentlemanly demeanor. He should help to associate in their minds fine scholarship with well-rounded manhood.

The college organization and methods of work should enable him to know personally the various students whom he instructs. They should look to him as a friend, interested in all that pertains to their welfare. The parents of every college student have a right to expect that the faculty will be as much interested in his true manliness as in his knowledge of Greek or mathematics. They should know whether he is studious or lazy, ambitious or indifferent, genuine or deceitful, pure or licentious, coarse or refined; and they should not hesitate to commend, encourage, or admonish, with the utmost friendliness and confidence, each student under their care. In the upper classes there is less occasion for personal oversight, but throughout his course every student should feel that, without espionage or needless restraint, the college officers take a genuine interest in all that pertains to his welfare.

2. If, as we have seen, the true aim of college training is development rather than knowledge, provision must be made in the course of study for the different tastes and aptitudes of different students. In most college classes a considerable number will be found who dislike a part of the work. In mathematics, for example, a few enjoy the study; some are indifferent; some simply detest it. To a large extent this like or dislike of certain studies is determined by the ability and enthusiasm of the instructor; but much is also due to constitutional differences among students. If we wish to secure good work from indifferent students, we must give them studies in which they can be interested. Better to yield somewhat to their preferences if we can thus improve the quality of their work. Better to cultivate in them a wholesome enthusiasm for one department of study than indifference to all. But while considerable freedom of election should be permitted, two dangers are to be avoided. First, the loss of will power. The student should acquire the ability to do distasteful work. He must not be governed by interest alone. While we avail ourselves of his natural tendencies in order to secure his vigorous

mental activity, we need also to teach him the lesson of self-mastery, and faithful performance of specific work, be it easy or hard. Second, we need to guard against the attempt to specialize too early. The electives of the college course should not be so arranged as to allow a student to narrow it down to one line of work. That is a misuse of electives which permits one sophomore to study nothing but history and another nothing but biology, as happened in a certain institution during the past year. Still less should that be termed a liberal education in which all the study is directed to the acquisition of a profession or industry in the shortest possible time. One is tempted to compare the standard which is thus set with the definition of a university given by James Russell Lowell as "an institution in which nothing useful is taught." While, then, such choice of studies should be permitted as will help to secure the best work on the part of the student and contribute to his growth, short and narrow courses, which subordinate the ideal of well-rounded development to a blind utilitarianism, should be steadfastly resisted and excluded.

In this connection your committee note as worthy of thought the successful attempts which have been made in several colleges to admit students to participation in college government. A college senate, or student council, in which all the classes have representatives, elected by themselves, has in some instances been found effective in securing harmony and co-operation between faculty and students and preventing misdemeanors which require discipline by the college authorities. The influence of this auxiliary to college government must be of great value in training students to manliness and self-control.

3. The typical American college has been the best example which the world affords of a true democracy. Merit has been the sole ground of preferment. Unworthy aims and motives have been held in contempt. Plain living has been joined to high thinking.

There is reason to fear that many colleges are losing this simplicity. They have not only shared in the general tendency to elaborateness which has come into our social and domestic life, but they have also taken on many other and peculiar features. That much of this change is inconsistent with the best results in the higher life of the college can hardly be doubted. Grant that some of the students in these colleges came from luxurious homes. Do they not spend money in college more freely than is necessary—more freely than when at home? Would it not be better for them to curtail some of their expensive habits? When a college dormitory is erected at a cost of half a million dollars; when it charges students from \$125 to \$250 a year for room-rent; when the average annual expenses of a class are \$939 in freshman year, \$1,041 in sophomore year, \$1,105 in

junior year, and \$1,215 in senior year, that college can scarcely claim that its influence favors plain living; and when one of its freshmen pays \$250 in one evening for floor tickets, box tickets, carriages, and flowers on the occasion of the junior promenade, there is reason to doubt whether he is making much progress in the art of high thinking. It will be a sad day for the higher life of the American college when it substitutes ease and luxury and social gayety for simple tastes and vigorous thought. Yet who can doubt that that day is ominously near when the average sum given by the students of a whole college for the support of athletics last year was \$15.41; when some of its students pay \$1,000 for suites of rooms; and when in hundreds of ways—credible, discreditable, and even shameful—students fritter away large amounts of their fathers' money?

In this connection your committee are glad to express their belief that college athletics, properly cultivated and restricted, are favorable to the higher life of the college. The conclusion seems to be established that the discipline, the regularity of life, the perseverance required of contestants in athletic sports, tend to make athletes more efficient in all respects. Training for honors in sportsmanship has much in common with training for honors in scholarship. It has, at least, the merit of directing the surplus vitality into innocent channels and helping to produce vigorous, self-reliant manhood.

But some of the influences springing from athletic contests are most unfavorable. Besides the wasteful use of money, they lead to familiarity with betting and gambling, to tricks and sharp practice in the arrangement and conduct of games, to fraud and dishonor in playing men who are not honestly eligible. These evils are already generally recognized and resisted, but must be effectually stamped out if our colleges are to have the benefit of clean athletics. The element of play can never be eliminated from college life. It is essential to the best development of youth. It has been said that it is work that transforms a boy into a man; but it is also to be said that the boy of promise plays. A boy who does not play and does not love to play is not a healthy boy, mentally, morally, or physically, no matter what his scholarly attainments may be. But the provisions for social amusements or athletic sports should not involve risks or needless disorder. The great intercollegiate games have often been the occasion for discreditable exhibitions of hilarious spirits which shock the friends of education, and even interfere with the rights of many others. Thus it was said that after a recent thanksgiving football game in New York, disturbances occurred in many of the hotels and theatres in consequence of excited and disorderly behavior on the part of the students who were gathered in the city to witness the game. If inter-

collegiate games necessarily lead to excesses and disorders they had better be given up.

Your committee are optimists. They gladly acknowledge all the progress that has been made in higher education in recent years. They believe its future progress should be even more rapid. To this end faults and deficiencies should be recognized in order that they may be removed. Especially should we guard ourselves against losing sight of the grand comprehensive purpose in a liberal training—the development of strong and well-rounded manhood. It has been our task to point out some of the influences which often impair the symmetry and the strength of college training. We cannot too carefully guard against these tendencies. But as the evils of cramming and mechanical drill have been eliminated from the lower schools by emphasizing the fact that it is the child, rather than the lesson, in which we are interested, so we may hope to eradicate the evils which threaten the higher life of our colleges by remembering that character is more important than learning. An education which is truly liberal will afford not merely a body of well-assimilated knowledge but will also adorn the life with the graces of refined and religious character and will open the mind to all truth.

For the committee,

JOHN E. BRADLEY.

WILLIAM F. KING.

JAMES H. BAKER.

A. S. DRAPER.

S. S. WILLIAMS.

DISCUSSION.

[REPORTED BY JOHN E. BRADLEY, of Illinois.]

MR. CHARLES DE GARMO, of Pennsylvania, in opening the discussion, said that he desired to point out some of the tendencies which prevail, largely under the leading of the Eastern colleges. One of these was an advance in the average age of students entering college. Formerly it was 16 or 17; now it is 19 or 20. The requirements for admission have been correspondingly advanced.

Another tendency, growing out of this, is for young men of limited means to cut short their general training, and go directly from the high school to the professional school. Now it is highly desirable to get back to the early conditions. But how to do it is the problem. Philadelphia has just changed her high school into a college by merely adding one year to its course. Perhaps the desired solution will be in the line of city colleges. Boys are now kept marking time in the preparatory schools because they are too young to leave home to go to college.

MR. B. A. HINSDALE doubted whether the solution of the problem proposed by Mr. De Garmo would prove effective outside of the cities. The great universities

have large numbers of undergraduate students. They do not wish to diminish their enrollment by dismissing a thousand or more students. It is undoubtedly true that boys can be fitted for college younger, but is it well for them to go to colleges away from home at too susceptible an age?

The subject of college expenses is one of great importance. Garfield told the speaker that he was troubled to see how college expenses had increased. He believed the ideal given in the report, of plain living and high thinking, should be maintained in college life. The type of the American college has gradually changed from the cloister life of the old-time English university to the organization of the present day, which is more nearly on the German plan.

MR. C. B. GILBERT believed the colleges of today are doing excellent work. He thought President Garfield must have been misinformed. Individual cases no doubt occur of extravagance in college, but his college-mates, as a whole, lived economically. He spent all he cared to in college, and his expenses were only \$600 a year. The increase of expense is exaggerated. The golden age is in the future, not in the past.

Referring to the remarks of Mr. De Garmo he did not believe we ought to go back to the old standards of admission. The present standards are none too high and the students are none too old.

MR. WILLIAM A. MOWRY did not believe extravagance prevailed among students. Expenses have increased everywhere. Neither did he think the length of the college course should be shortened or the requirements for admission lowered. Life demands more than it did fifty years ago.

MR. GOVE said that we do not care to live in the past, or gauge our expenditures by the standards of the past. A boy in college ought to spend \$1000 a year if he can have it. Because I endured hardships and struggles, due to conditions forty years ago, is no reason why my boy should suffer the hardships of bygone days.

MR. S. G. WILLIAMS of Cornell University expressed his obligations to Mr. Gilbert for putting so forcibly a protest he had intended to make against an idea that it is becoming more difficult for poor but talented young men to get a college education. As a college officer he had occasion to know that this is not the case, but rather the contrary; for great numbers of scholarships and fellowships are now open to such men which in earlier days were little known.

While as a member of the committee he heartily endorsed all that it had said, he was inclined to emphasize more strongly than the committee had done, as highly influential elements of the higher life of colleges, the agency of those voluntary associations of students which exist in most colleges, such as the Christian, philosophic, and scientific associations, and the congresses which have so usefully superseded the old debating clubs, and afford so effective means for becoming familiar with civics.

While agreeing with the committee in its estimate of the value of personal relations of students and faculty, he believed there should be careful avoidance of all that would interfere with the independent initiative and self-direction of students. A young man should carry away from his college experiences the habits of self-reliance and self-guidance which can be gained only by leaving him in all usual cases to make his own decisions, and to abide by the consequences.

He was also inclined to think that the Greek letter fraternities were playing, in the main, a beneficent role in the higher life of the college; for the noteworthy

decline in the silly brutalities once so prevalent in colleges seems to be largely due to the fraternity influence. Possibly quite as much is due to this as to the student's participation in college government of which guarded mention is made in the report.

MR. BAKER said the question of the length of the college course was very important. It was one in which he was deeply interested. He had corresponded widely with reference to this matter, and he had found a widely prevalent sentiment in favor of a shorter course. He would not attempt to decide where it should be, but somewhere, it might be in the lower, or it might be in the higher departments of study, the work will be curtailed. He earnestly believed the influence of the college should be as urged in the report, strongly in favor of broad Platonic culture. Premature specializing and utilitarianism should be discouraged. He would not fetter the influence of the college by requiring attendance upon perfunctory college exercises.

MR. DUNTON.—My observation does not cover the whole range of human experience, but I have observed enough to warrant the induction that a mere change of name does not change the nature of the thing named. I have had that conclusion verified since I have been in this good city. Milk in small pitchers is called cream, but I find that milk by any other name is just as thin. If I am right in my induction, it follows that if a high school is called a college, and even if the degree of A. B. is given, the work remains the same—it is just as thin—and the real difficulty continues. You have merely re-named the high school and omitted the college.

HOW THE WILL COMBINES WITH THE INTELLECT IN THE HIGHER ORDERS OF KNOWING.

BY W. T. HARRIS, UNITED STATES COMMISSIONER OF EDUCATION.

PREFACE.

The most important portion of psychology for the teacher is that part which relates to the different orders of knowing. There seems to be a scale of powers of thought. Some would call these faculties. The weakest stage of development is connected with mere sense-perception; the highest stage of thinking is that which deals with the necessary conditions of all being. Education in the course of its progress should broaden and deepen the intellect; it should make possible the thinking of greater and greater combinations. Hence the teacher should be familiar with the scale of thought, and know how to recognize a higher order from a lower order. Moreover, he should know how the higher order develops from the lower. In psychology these stages are commonly named sense-perception, understanding, and reason, technical terms derived from Coleridge or from Kant. Older psychology named them, from Aristotle, sense-perception, discursive reflection (*διανοια*), and theoretic knowing, or the knowing of the

divine (*θηοπετιν*). In more recent psychology we may find the three steps described as (1) sense-perception, (2) a knowledge of the relativity of things or the correlation of forces, and (3) a knowledge of the absolute—which, however, is described as a knowledge not possible for men.

In the following paper I have described six stages of knowing. First, simple passive reception of impressions without the action of the will; second, the first direction of the intellect by the will, producing attention; third, the second action of the will, using attention repeatedly and guiding its successive acts—analysis; fourth, the third intention of the will, which, through analysis, discovers relations to other objects or beings, and thus discovers relativity or the relation of dependence upon other things. This last is called synthesis. The general name, reflection, is given for the union of synthesis and analysis, and this is our fifth step. Up to this point we have traced the orders of knowing from the simplest sense-perception up to the highest scientific knowing. There is a sixth order of knowing which considers the action of independent beings or wholes and formulates the necessary truths concerning the totality of relative beings which belong within it.

I shall omit all reference to the activity of the soul known as feeling, considering only the other two activities, namely will and intellect, except in so far as to say here that feeling may be considered as the embryonic form of both will and intellect. On the side of desire feeling moves towards the will. On the side of sensuous impressions feeling relates itself to the intellect. It is evident that feeling cannot be educated directly in itself, but only mediately through the intellect and the will. The will is trained by forming habits; the intellect is trained by developing higher orders of knowing. When a habit is formed and a theoretical view is reached by the intellect which corresponds to that habit, it will happen soon that feeling will come to contain the contents of the willing and knowing in the form of immediate impulse or unconscious tendency. Therefore the feeling can be cultivated, and is cultivated, in fact, with the growth and development of the intellect and will.

THE SIX ORDERS OF KNOWING.

1. It is usually taken for granted that the mind is at its lowest stage of self-activity in sense-perception; that is to say, when it is simply receptive of the impressions of the senses. The moment it attempts to guide these impressions, or to reflect on them, the mind ascends to higher forms of activity, and limits the scope of its passivity.

When at this lowest point of activity, the infinite manifold of objects before the senses engrosses the entire attention. One object succeeds another in controlling the focus of attention. This condition of mind is very nearly that of the idiot, who is successively attracted by one object after another, and never reflects or connects these objects by the thought of causality, or attempts to guide his perceptions and make them a consistent whole. The contents of his mind are, therefore, a mass of sense-perceptions, without connection between them.

2. Intellectual culture begins when the will first commences to act on the senses. Its first action produces what is called attention. Attention selects one subject out of the manifold and collects the various impressions made upon its senses, while it willfully neglects the multitude of other objects that are in its presence—it inhibits the consideration of these others. Attention, then, may be regarded as the name of the first union of the will with the intellect. It turns the chaos of sense-impressions into a system by connecting them about a focus arbitrarily chosen.

3. Attention gathers, one after the other, the sense-impressions that proceed from the particular object, and it discriminates these. And by this discrimination it separates and defines the object from other objects. Hence the first product of attention is analysis, and we may therefore call analysis the second product of the union of the will and the intellect. By analysis the sense impressions are properly grouped and carefully discriminated, and through them the object is defined.

4. Continued analysis discerns in the isolated object the influence of other objects. To recapitulate: The object is isolated by attention; analysis discriminates and defines its properties and qualities. Analysis is composed of repeated acts of attention. The will isolates the object and excludes others from it; then again it selects a portion of this object for its minuter attention, excluding the rest of the object; again and again narrowing its attention down to more and more limited fields of observation, it approaches the simplest elements. This is analysis. But in taking account of the simplest elements of the object it discovers its (object's) complication with other objects. It notes the reaction of other objects upon the object it has chosen for its attention; it notes evidences within the object of reaction upon other objects. This result of repeated analysis is synthesis. Thus we have analysis as the result of repeated acts of attention, and we have synthesis as the result of repeated acts of analysis.

5. Synthesis, then, is the discovery of connections, of reciprocal

actions, of the action of the object upon other objects, and of the reaction in turn of these objects upon it. Synthesis, then, results in the discovery of relativity—a system of relations in which the object stands to other objects. The continuation of this process is called reflection. Reflection consists of analysis and synthesis—the descent to the elements and the ascent to the complex interrelations which form the constitution of the object. Here I use analysis and synthesis as applied to objects of experience. This activity of reflection and of its separate elements of analysis and synthesis is called the understanding by some schools of thought.

Again, naming these in a different way, we can say that these are the potencies of the mind, the first potency being attention simple; the second potency being analysis; the third potency synthesis; the fourth potency reflection.

Still further, if we regard the essential personality as will power, we can describe the various stages of growth thus far considered as the directing of the will or personality upon its intellect, overcoming its passivity, and directing it actively towards the mastery of the world.

6. There is another step of the intellect above that of reflection just described. We may call it insight, or philosophic knowing. Just as each of the other stages of knowing arises from the persistent and systematic use of the lower orders of knowing by the will, so the highest, or insight, arises from the systematic use of reflection through the will. Reflection follows out relations of dependence and acknowledges relativity as its highest category. Its doctrine is that each thing depends on everything else. It holds that all knowledge is relative because all things are relative, existing in a system of mutual dependence. The final result of this process of reflection is to reach a whole of mutually dependent beings. This is evident when one considers that when reflection arrives at the conclusion that dependence is everywhere present among things it is able to state its principle in a universal form; and hence it now has before it a whole—to it there is one system of interdependent things in time and space. This is the summit of the understanding.

But now it becomes possible to discern some facts regarding the whole as a whole. This order of knowing is called reason by some psychologists. For illustration of the character of its knowledge, take as an instance, first, the insight that the whole cannot be dependent on another whole. The whole must be independent. Second, it follows that the whole must be self-active, because it cannot by any possibility receive its causal influence from another; and, on the other hand, it must originate activity within itself because there is within

it a constant process of dependence and interrelation, causing changes or metamorphoses of integration and disintegration.

This predicate of self-activity, applied to the whole, is the most important conclusion reached in this higher kind of knowing. It is very important to get this clear. And yet it must be noted as a fact that the scientific stage of mind, which may be called the analytic and synthetic or reflective stage, holds itself back determinedly from thinking the totality. It inhibits that thought. Those, on the other hand, who take up this stage of thinking have definitely adopted the method of philosophical thinking.

The following review of the points named will assist in making clear the necessity of this insight into self-activity. Interrelation or dependence among all objects in time and space necessarily implies the unity of the whole. The whole is one being. Destroy any portion of it, and you change all of the constituent parts by shutting out a portion of influence that exercised an effect upon these. Secondly, bearing in mind that the whole is not dependent upon anything else, one may see that it is essentially the originator of the movement of action and interaction going on between the beings which compose this whole.

If one should attempt to avoid this by supposing that simple mechanical interaction, a sort of persistent motion or persistent force, is constantly and eternally active within the whole, then consideration must be invited to the character of this kind of perpetual motion. Any force, as we know it, is a running down of some tension that has been wound up. Any force is therefore essentially dependent upon an opposite force. The correlation of forces, therefore, as a whole, has the form of a series in which the running down of the first force (the same being transmitted to each successive member of the series) finally winds up the last force into action, and that one winds up the first. It is a contrivance of such a kind that the running down of a force effects its own winding up, although through a long series of other forces. Now such a thought as this is absurd from the standpoint of mere relativity, but it is an admission, on the other hand, of self-activity as the principle of the whole. Self-activity can always reproduce a new tension of force; that is to say, it can forever wind up its tension when collapsed. The doctrine of correlation of forces therefore has (coiled up in it as an implication) the idea of self-activity to make it possible. Hence the stage of knowing which deals with the nature of a whole regards self-activity as the principle of explanation, if it is logically consistent.

REMARKS.

1. It is to be admitted that this progressive series of stages of knowing, arising from the action of the will upon the intellect, would at first be supposed to lead away from reality towards abstraction; or, in other words, from the concrete to the abstract. But, in fact, it is otherwise. The higher members of the series of knowing are more adequate and reach the concrete truth, while that kind of knowing which merely knows impressions without taking cognizance of relations is an abstract knowing, because it deals with mere dependent things, properties, and qualities, without seizing them in their true relations, whereas, the reflective knowing seizes things in their causal relations, which make them possible and sustain them in being. It is a more concrete kind of knowing, therefore. But the kind of knowing which I call insight—which explains the dependent things by the independent whole—is philosophic or theologic knowing. Its aim when realized enables one to see each thing in God's final purpose in the universe. Hence what we call insight deals with moral purposes.

2. It is true that the psychological theory of these kinds of knowing is apart from and unnecessary to the realization of the kinds of knowing themselves. That is to say, a person may be engaged in analysis without knowing that it is analysis, and without any special information regarding the nature of analysis. Physiology and hygiene give one an insight into the processes of digestion and respiration, but are not necessary for the performance of those functions. One breathes and digests quite as well without a scientific knowledge of the nature of the process. But such scientific knowledge is indispensable to the pathologist. So, too, one pays attention, analyzes, reflects, and reasons, without knowing scientifically what is involved in such acts. But the science of psychology is necessary for settling all questions of educational criticism. To see the complexity of the physiological process of digestion or breathing astonishes us. Still more does it astonish the psychologist when he for the first time traces out the complexity of the most ordinary mental processes. The accumulation of one act upon another, each higher one acting upon a lower one, is a continued process of involution which seems at first wholly incomprehensible. But complete self-knowledge implies this knowledge of processes.

3. To recapitulate briefly, the will unites with the intellect to produce attention, analysis, synthesis, reflection, and insight. We have sufficiently discussed the necessity of the will in order to make possible the first three of these activities. It is obvious enough without further discussion that reflection is possible only by holding back through

the will the mind from the action of impressions upon the senses. It inhibits direct sense-perceptions and confines itself to the analyzing and combining past sense-perceptions recalled by the memory.

But the action of the will upon the intellect is most manifest in the fourth order of knowing, to which we have given the name insight. For the inhibition of the will is here most complete and thoroughgoing, for the will drops the entire field of experience, together with its data of sense-perceptions, and commences from the other extreme of the order of being. It inquires what must be the nature of a whole or total, and finds these categories of independence and self-activity. It uses these, and applies them to the contents of experience as ultimate explanations.

4. Science may ascertain that a thing is, and expound its interrelations with other beings, but philosophy and theology have not explained an object until they have shown its place in the purposing will of the Absolute First Principle of God. That is to say, philosophic knowing begins with the highest presupposition of a being, and not with its immediate presentation to the senses. Science thus proceeds from the incomplete to the more complete and towards the absolute, while philosophy and theology proceed from the complete towards the incomplete, following the creative purpose.

5. The most important thing to be noticed in the theory here presented is, that the will as a self-determining power, uniting itself with the intellect in the ascending series of attention, analysis, synthesis, reflection and insight, approaches at each step nearer and nearer to an adequate knowledge of itself.

6. Insight, the completest order of knowing, may be said to have as its object pure will; for a self-active whole is precisely a will. Hence insight is self-consciousness in the full meaning of that term, for the self as will perceives, will, or a self, as the fundamental being and final explanation of things. It is only this kind of knowing (which may be called theistic knowing) that can recognize truly what is involved in freedom and responsibility. The lower order of knowing, here named reflection, which deals with analysis and synthesis, and arrives at nothing beyond universal relativity, cannot consistently admit the idea of freedom or responsibility. It does not entertain the idea of a whole or a self-active being, and hence cannot conceive of will as a form of being.

DISCUSSION.

MR. HARRIS remarked by way of introduction to the printed report: This paper does not attempt to do anything with empirical psychology; it is a study in rational psychology. Rational psychology and empirical psychology are not substitutes for each other; both are essential. An important thing in rational psychology is knowledge of the different stages of knowing. This knowledge is necessary for the teacher as a canon by which to judge the stage of the child's advancement, and in order to avoid over-emphasis of lower stages.

Mr. Harris then reviewed the several points in the report.

MR. HINSDALE.—Do I understand Mr. Harris to say that attention is always associated with will, and, if so, what does he say to automatic attention?

MR. HARRIS.—I put the automatic attention with the first, the least rational stage of knowing.

MR. HINSDALE.—Is not the tendency of the mental life toward automatism, and, if so, what becomes of the will?

MR. HARRIS.—The whole direction of mental development is away from automatism.

MR. BAKER.—We should give principal attention in this direction to the upper end of the ladder. We are all substantially agreed about the lower stages. We differ in opinion about the sixth step. The sixth kind of knowing should be emphasized in university teaching, and recognized in the requirements for advanced degrees.

MR. DE GARMO.—This ladder might apparently be a guide for a recitation, for a day's work, or for a lifetime. I should like to know the time relations in the use of this scale.

MR. HARRIS, referring to the earlier stage of his discussion, called attention to the fact that Mill and Bain stopped short of Spencer, who, in turn, stopped short of the sixth step of knowing.

Replying to Mr. De Garmo, Mr. Harris said: Some people remain practically in the first stages of knowing all their lives. Some men arrive at the sixth stage of knowing after fifty. This paper was not, however, written to supply a programme, but to furnish a canon for the judgment of mental growth and methods of development.

MR. DE GARMO.—Are not all these stages of knowing present in every one every day?

MR. HARRIS.—Not in those who have not reached the higher stages.

MR. HINSDALE.—In dealing with subjects which do not attract interest there is at first a comparatively intense effort of the will. Later on these processes involved become easier. Is this greater ease a result of the strengthening of the transcendental will, or is it the result of acquired automatism? We want to develop a certain amount of automatism, but we want always to strengthen the will in the interest of freedom.

MR. HARRIS.—Automatism is an important thing, but it does not affect this ladder.

MR. HINSDALE.—How are we to get the values of automatism, and at the same time grow toward freedom?

MR. HARRIS.—Automatism does not belong in this discussion.

MR. DE GARMO renewed his question as to the time relations of the scale, which he thought important in relation to the question of correlation. Mr. Harris agreed with the view that the higher stages of knowing are to be found in association with the lower.

MR. SOLDAN distinguished between definition of will as exemplified in a conscious volition which is always preceded and associated with an idea, and the Schopenhauer view of will as force in nature and impulse in men. He did not understand the paper to deny place and importance to automatism. With regard to the sixth stage of knowing, he said: Without denying the reality of the transcendental will, I am not sure of the inference by which one would proceed from the fact of such a transcendental totality to its self-activity.

MR. DUNTON.—I have been pleased with Mr. Harris's paper and with his able extemporaneous elucidation of the doctrine which the paper sets forth. I find no trouble in translating his paper into the nomenclature of my own pedagogical instruction. I believe a clear insight into the different kinds of mental action and their dependence upon one another is the very foundation of the science of teaching. Many teachers confuse their pupils by requiring them to attempt a reversal of the natural order; but a clear knowledge of the doctrine of this paper keeps them in a consistent course. There is a natural order in the unfolding of the mind and in its grasp of the truths of any subject; and this order must be followed, if the pupil is to see clearly. The relation of the action of the will to intellectual action cannot be too strongly insisted upon. It is not what we decide for the pupil that sets him forward in his development, but rather the voluntary effort that he himself makes. Keep him at the work for which he has the power and keep him self-active, and the conditions are fulfilled for his most rapid progress in knowledge and the formation of character.

MR. FAIRCHILD asked what stage the scientist has reached who constructs the atomic theory.

MR. HARRIS replied that atomism is the philosophy which makes the sensible world transcendental. It is the philosophic idealization of the lowest kind of knowing.

MR. HINSDALE restated his question concerning automatism.

MR. HARRIS.—We must use each step as a means to the next. To this end each step becomes in turn automatic.

In conclusion Mr. Harris said that to each of the three main stages of knowing there corresponds a philosophy: to the first the philosophy of Atomism; to the second the philosophy of Substance, as, for example, that of Spinoza; to the third the philosophy of Personality.

REPORT OF THE COMMITTEE ON SCHOOL SANITATION, HYGIENE, AND PHYSICAL TRAINING.

BY WILLIAM A. MOWRY, HYDE PARK, MASS., CHAIRMAN.

We are living in an educational age. The electric light is turned in full blaze upon the schoolroom. The American system of public schools is under discussion and subject to criticism everywhere.

Within a few years past great changes have taken place, and important improvements have been introduced which have affected all grades and all phases of educational work. The curriculum has been materially modified. The colleges are enlarging and developing their work on every side. They have demanded a more extended preparation from the secondary schools. In turn, the high schools and academies have required larger and better preparation from below. The "enlargement and enrichment" of the course of study in the elementary schools has been the result. These transitions are hardly yet settled into permanence.

In methods of instruction the changes have been, if possible, greater still. The preparation of teachers has received renewed and enlarged attention. School architecture, especially in the large cities, has been greatly improved, and the work of supervision has now entered upon new lines, where its importance is beginning to be properly appreciated.

It will thus be seen that within the present generation important improvements have been made all along the line of public school work. It is remarkable that with all the discussion and all the improvements in these different directions, so little progress has been made in school sanitation. The public is not yet awake to the fact that the laws of health should be regarded as the basis of the entire work of education. In the new palatial schoolhouses lately built, much attention has been given to lighting, heating and ventilation, but the old schoolhouses are vastly in the majority, and they remain just as bad, and a little worse, than formerly. It is greatly to be feared that but few, even among the educators themselves, are aware how horrible the hygienic and sanitary conditions are, all over the country. Here and there a few thoughtful persons observe the facts and speak out plainly and forcibly. Too often, however, their words are as the idle wind. Sometimes nothing is done; often only spasmodic efforts are put forth to improve the situation. In the city of Boston the present mayor has lately inquired into the hygienic conditions of the schoolhouses,

and has found them so objectionable that he has recommended borrowing the money and making an appropriation of \$300,000 to secure for them better plumbing, heating, and ventilation. The city council has already voted the sum of \$75,000 for this purpose. Throughout the whole country the deplorable hygienic state of the schoolhouses is such as to demand serious attention and prompt relief. It may not be deemed improper just here to state that this report embodies the results of somewhat careful and extended study of this subject for many years, especially in respect to "Floor space and air space," "Quantity of light," and "School desks and seats."

TOO LITTLE FLOOR SPACE AND AIR SPACE.

Some years ago statistics were obtained from the large cities of the country concerning the amount of floor space and air space, per pupil, in the schoolhouses. In one large eastern city, having more than 1200 schoolrooms, it was found that the average of all the rooms gave less than seven square feet of floor space and less than ninety cubic feet of air space to each pupil. Several cities showed an average of less than ten square feet of floor space and less than 100 cubic feet of air space to each pupil, and only one or two cities at that time, in the whole country, gave, on an average, sufficient floor space or air space. Those who have inquired into the existing conditions in these respects know full well what a crying evil this is. Little children huddled together six hours a day in the schoolroom with only five, six, seven, and eight square feet of floor space to each one, breathing the air from fifty to one hundred cubic feet of air space allowed to each one, with a totally inadequate supply of fresh air from all sources is a crime against nature, and the conditions are aggravated by compulsory laws in many states obliging the children to attend the schools.

The authorities of Paris twenty years ago claimed that each pupil should have from 250 to 280 cubic feet of air space, with a change of from 400 to 500 cubic feet per hour. This estimate is far too small. They also stated that "any heating apparatus that does not provide for regular change of air in some form is injurious to health." Dr. Buck of New York asserts that "we expire from fourteen to twenty cubic feet of air per hour, requiring 200 times that amount of fresh air to dilute it to a health basis, or 3,500 cubic feet per hour." The leading modern writers vary in their estimate of the amount of the fresh air supply needed, their figures ranging from 2,000 to 3,500 cubic feet per hour for each person. It is now generally agreed that the necessary floor space for each pupil in a schoolroom should not be less than twenty-five square feet, and with the best ventilating appliances every schoolroom should furnish 300 cubic feet of air space per pupil.

The overcrowding of children into small schoolrooms with altogether insufficient ventilation is a crying evil which has been often mentioned and frequently discussed, yet very little relatively has been done to correct it.

A father called at a schoolroom one day to see his little girl. She was not a strong child; had weak lungs and was otherwise delicate. The father had endeavored to keep the best hygienic conditions about her. He had taken particular pains to have her sleeping-room well ventilated, and to keep her as much as possible in the open air. Of that schoolroom the father afterward said: "It makes me sick to think of that odor now; and my little girl had been in there breathing that air three-quarters of an hour. The teacher did not know the air was insufferable. No, indeed, she had been breathing it with the rest, and was used to it; but to one going in from the pure air out of doors it was simply horrible; and how could it be otherwise? There were perhaps fifty pupils there, breathing the same air over and over, some of the children were not over-clean, and some affected with incipient diseases that made the exhalations from their lungs dangerous." Yet even in such vile conditions the teacher must expect her pupils to be attentive and quick of understanding.

QUANTITY OF LIGHT.

It goes without saying that every schoolroom should be well lighted, yet everybody knows that not all schoolrooms are well lighted. Even at this late day we are not all agreed as to what constitutes the best lighting for the schoolroom.

1. We shall all doubtless agree that there should be no windows in front of the pupils when studying at their desks.

2. Many believe that there should be no windows behind the pupils, which would thus face the teacher's desk. Those who would allow such windows generally limit the light entering from the rear to one-third of that entering from the side.

3. Some experts insist that the best lighting requires windows at the pupil's left side, and only on one side of the schoolroom.

Then as to the quantity of glass. Very few schoolhouses have too much light. It is generally conceded that the surface of the window-glass should be equivalent to 10 per cent. of the surface of the floor, and that no pupil should sit more than thirty feet from the windows. The location of the windows is also a matter of importance. No schoolroom should be less than thirteen feet in height, and the top of the windows should be within one foot of the top of the room. The windows should then be from eight to nine feet in height.

A serious evil, frequently found is the custom of using Venetian

shades, or blinds with swivel slats. Nothing can be worse for the eyes than partially cutting off the light while allowing narrow beams of it to stream in through the slats. The best method of shutting out the sunlight is by semi-opaque curtains, and blinds with fixed slats.

Severe charges are frequently made by oculists against the schools. They assert that studying injures the eyes, and that the schoolroom is responsible for numerous cases of defective eyesight. Doubtless in many instances these charges are true. Hence it has come to be quite generally admitted that the work of the schoolroom is necessarily antagonistic to good eyesight. It is believed, however, that under proper conditions the reverse is true. The evils complained of are chiefly the result of wrongly constructed schoolhouses and bad seating. Many illustrations of this statement could be given. In a school of 200 boys located in one of the eastern cities, examinations were made some years since which tend to show that under proper conditions school work is not deleterious to the eyesight. A new schoolhouse had been built with due regard to proper light. In every room the light came in upon the left side of the pupils. The surface of the window glass was equal to 10 per cent. of the surface of the floor. No seats were placed more than thirty feet from the windows. The top of the windows was twelve feet from the floor. An eminent oculist examined the eyes of the 200 boys, and made a careful record of their condition. Two years later a second examination, and two years after that a third examination was made. The result showed that in general, the condition of the eyes was better at the end of the four years than at the beginning. A few cases of myopia existed, but the increase of the difficulty during these four years was less than is ordinarily the case with boys of the same age. It is highly desirable that such examinations of the condition of pupils' eyes should be made from time to time, in the various cities of our country.

HEATING AND VENTILATION.

Much attention has been given of late years to the methods of heating and ventilating schoolhouses. As to the matter of ventilation, while a few principles have been established, yet, in the main, we are all afloat and out on an open sea. Nobody yet understands ventilation, and that is one of the arts to be developed and carried to perfection by those who are to come after us. It is now generally agreed that some permanent and constant power is essential to the successful ventilation of buildings. No system should be employed which does not furnish a proper supply of fresh air to each room.

What the proper supply should be has already been indicated under the head of "Floor Space and Air Space."

In regard to the heating of schoolhouses it ought to be laid down as a principle and agreed to by every educator, that no system should be employed which does not furnish the heat by indirect radiation. Whether from furnaces, steam pipes, or hot water pipes, fresh air should be heated and sent into the schoolroom in sufficient quantities to answer the demands both of heating and ventilation. It must, of course, be borne in mind that if fresh air is introduced into the schoolroom there must be ventiducts sufficiently large to carry off the vitiated air. Mr. Ross Turner says: "As a rule, I have found schoolhouses *underclean* and *overheated*." The overheating of schoolrooms is altogether too common, and frequently is the fault of the teacher. Ordinarily the temperature of the schoolroom should be kept not over sixty-eight degrees.

CLEANLINESS.

If an artist like Mr. Turner is in the habit of visiting schoolrooms he will certainly say that they are "underclean." Indeed, if cleanliness is next to godliness, it is to be feared that God has been banished from many schoolrooms. This uncleanliness is proverbial, yet we go right along keeping the schools year in and year out in these same unclean houses. Can any question be more important than this: "How to make our public schools cleaner and more wholesome, and our school children happier and better mannered?"

A committee of the Society of Collegiate Alumnae has recently made a report upon this subject, in which they say:

"Eighty per cent. of the methods of ventilation are reported as not working well. * * * In a few cases the shafts from sanitariums and classrooms have their outlets at the same point, with the consequent result that back drafts bring the doubly vitiated air back to classrooms. * * * Fifty-nine schoolhouses had never been washed since built, in a period of years ranging from fifty down to five. * * * Skirts and underclothes are filthy at the end of one day."

A superintendent of schools in an eastern city, on visiting a schoolroom one day, found the air too much heated. On speaking to the teacher about it, she said she could not help it.

"Can you not close the registers?"

"They are closed," she replied.

"Can you not open the windows?"

"It is not allowable; the pupils will take cold."

"Then march them around the room while the windows are opened, until the air is changed."

"I cannot," she said.

"Why not?"

"It will kick up such a dust that we cannot breathe."

The superintendent replied, "I think we will try it." He did. The windows were opened, and the scholars were marched around the room until such a dust was created that coughing was the rule and not the exception. It was an old schoolhouse, perhaps fifty years old, and the superintendent said he had never known the floors to be washed. Let it not be supposed that this state of things exists only in one section of the country. Look into the matter, good friends, in your neighborhood, and it is to be feared you will find the same evils to some extent existing there.

It is not the purpose of your committee to discuss all the branches of this great subject, but rather to call attention to a few points where the remedy is easily apparent and a marked improvement ought by all means to be made. They desire to give the greatest prominence to the following topic—"School Desks and Seats"—and to make it the principal subject of their report:

SCHOOL DESKS AND SEATS.

The proper seating of the schoolroom is to-day certainly a matter of great importance. Perhaps it should not be regarded as of greater consequence than lighting, heating and ventilation; but possibly just here the educators of America and the people at large are more backward and less successful in the discharge of the duty they owe to the rising generation than in all other matters relating to school hygiene. It is now more than sixty years since Dr. Samuel A. Eliot, the father of the present president of Harvard University, made a report to the Boston School Board on school hygiene. In that report he said: "More care is given to the health of the convicts in the penitentiary than is bestowed upon the health of the children we send to our schools." He insists that "it is the duty of parents, and those who act for them, to take care that the schoolroom shall be a place where children may acquire the use of their intellectual faculties without having their physical organizations disturbed or their vital powers debilitated by a constrained position or an impure atmosphere." It is to be feared that the sixty years which have passed since this report was made have not entirely remedied the difficulty which at that time seemed so great. Forty years after Dr. Eliot's report Superintendent Philbrick insisted that "we ought to aim not merely to avoid injuring the health of pupils while carrying on their instruction in our schools, but to increase their physical health, strength and beauty; for complete physical health and development is essential to the truest and best intellectual results in education." Very much of the school

seating now employed in the United States may truthfully be characterized as execrable. We have doubtless begun to improve; indeed, the beginning was a long time ago; but today we have only made the beginning. The people would appear to be in entire ignorance upon the question, and experts in education are sometimes but little in advance of the people. The difficulties in the way of any rapid improvement in this direction are various. The greatest sin is the sin of ignorance, of which all are guilty. Teachers and superintendents may know far more concerning these matters than the people, but their knowledge is nugatory because it is discredited. It is seldom that they are allowed to say how a schoolhouse shall be built or how a room shall be seated. Dr. Charles L. Scudder, in a pamphlet upon the "Seating of pupils in the Public Schools," published four years ago, described the method ordinarily pursued at the present day, of providing seats and desks for new schoolhouses. This is what he says:

A schoolhouse is built and ready for seats. The commissioner of public buildings, or his assistant, having ascertained the grade of the school and the number of pupils to be accommodated in each room, sends an order to the manufacturer of school furniture who is fortunate enough to hold the contract for the current year to seat and desk the building. The manufacturer, knowing approximately the ages of the children who will attend a school of the given grade, provides desks and seats as he sees fit, furnishing one, two, or three sizes to a single room, as he is inclined, or as may have been suggested by the head master of the school.

How does the manufacturer determine the sizes that shall be sent to meet the requirements of certain ages? After corresponding and talking with those who have supplied for many years large cities, including Boston, with school furniture, I find it impossible to learn how the standard of the height of desk and chair has been determined. Some of the recent manufacturers have a scale of desks which is arbitrary, and based on no accurate data whatever. The scale is arranged with convenient differences in size, and assigned to different ages, irrespective of height and growth.

We have discarded the long desks and long plank seats behind them, and have adopted the single desk and single seat system. We shall never discard the single desk and seat. Within a few years attention has been turned both in America and Europe, to the production of adjustable desks and seats. This is a great gain. The adjustability, however, as yet has proceeded only so far as the height of the seat and the height of the desks are concerned. Adjustable desks and seats ought to be provided everywhere. It may not be economy to displace all existing desks and seats and replace them with those which are adjustable, but at least a few of them might forthwith be placed in every schoolroom. The adjustable seat and desk is an important invention, and the manufacturers are entitled to great

credit for producing them and urging upon the community their adoption.

Go into almost any schoolroom in the land, and you will find children sitting upon seats entirely unsuitable. Some are too low, so that they cannot sit with comfort. Often the seat is too high, and the little children's feet are dangling in the air. Still further, if the seat should happen to be adapted to the pupil, the desk may not be. The height of the seat should be governed by the distance between the floor and the knee, and the height of the desk above the seat by the length of the body, or rather by the position of the elbows when the forearm is placed upon the desk. Children with long lower limbs will require higher seats, but only those with long bodies will need higher desks than others. The adjustability of desks and seats has as yet been attempted only in one direction—simply the height. It leaves entirely out of consideration all the other questions pertaining to school seating. Dr. Scudder, in his report already referred to, after careful consideration of the subject, comes to the following conclusions:

1. That the present method of seating is at fault, in that children are compelled to sit in desks unsuited to them.
2. That this method of seating tends to the production of permanent deformity of the spine.
3. That the poor seating in our schools has not been hitherto sufficiently emphasized by orthopedic surgeons as a cause of spinal deformities.
4. That a larger number of different sized desks and seats, or adjustable desks and seats should be provided for each schoolroom.
5. That the teachers of the public schools should be impressed with the fact of the importance of maintaining erect positions, both in sitting and standing.
6. That having greater variety in sizes of seats and desks, and recognizing the danger of malpositions in sitting, great care should be used to seat each child before a desk and in a chair as nearly as possible the proper size.
7. That the desk should be low enough to just allow the bent elbow to touch it when the hand is raised to write without raising the shoulder or tilting the trunk.
8. That the chair should permit easy contact of the whole sole of the shoe with the floor when the child sits well back in the seat.
9. That foot-rests should be used more than at present, not only to support the foot and leg, but to give a feeling of support to the whole trunk, and to prevent the slipping forward of the buttocks upon the chair, causing one of the commonest of bad postures.
10. That the present system of gymnastics in use in the public schools will help to overcome slight tendencies to deformity which might go unchecked and lead to disastrous results.

These results do not all flow from the simple matter of height of desk and chair. A very important point is the distance between the back of the chair and the edge of the desk. Throughout the whole

country, with but few exceptions, this distance is too great. The average child of five or six years requires a space between the back of the chair and the desk of seven to eight inches. In order to have freedom of movement, this space, for the youngest children in school, should be nine inches. Many a primary schoolroom in various parts of the country will show this distance to be twelve inches and over, and in not a few instances even as great as sixteen inches. In academies and high schools the largest distance ordinarily required between the back of the chair and the edge of the desk should not exceed thirteen inches. The true scale, therefore, from the primary school to the high school, would range only from nine to thirteen inches. Think of a little child, whose body from front to back measures but eight inches, sitting upon a seat with twelve or fourteen or sixteen inches space between the desk and the chair back. How shall the child sit? If he is to sit back in the chair, as he ought to sit, he will be too far away from the desk for study or writing. If he brings his body into a proper position for using the desk, either in writing or as a rest for his book, he must sit upon the mere front edge of his seat. Moreover, what temptations this condition of things offers for sliding the body downwards under the desk, and sitting with his shoulders only against the chair back.

The attention of the members of this council is respectfully called to this great evil. If the seat were as near the desk as it should be a large proportion of the evils resulting from incorrect seating would be obviated. The children would not only be compelled to sit upright, but would find this position more agreeable. Your committee are convinced that a large part of the curvature of the spine which physicians charge upon the schoolroom would be prevented if the seat were placed sufficiently near the desk.

THE SCHOOL DESK—ITS USES.

It should be distinctly borne in mind that the desk in the schoolroom has several different purposes. In the first place, it is used for placing upon it the paper, the book, or the slate for writing, and its present construction is evidently with this primarily before the mind.

Its top is flat, and inclined toward the pupil at just that angle which is considered the best for writing.

But, in the second place, the desk is even more constantly used to hold the book in studying. It is just here that the ordinary construction fails to meet the purpose required. It has not the adjustability for this purpose. If the book be placed flat upon the desk the child must bend over in order to read the page. If he sits upright, he must hold the book upon the desk or against its edge with his hands. In

this case, the book may be too near the eye, or too far from it. Hence, for this purpose, the construction of the desk is faulty.

The effect of work in the schoolroom upon the eyes has already been considered. The deleterious strain upon the eyesight arises principally from abnormal conditions. Whenever the book is used, it should be held at a proper distance from the eye, perpendicular to the line of vision, and at a proper height to secure the best effect of the light upon the page. The ordinary school desk fails in every particular to meet these requirements. Here is a necessity for adjustment of more importance than the regulation of the height of seat and desk. It would seem necessary to transform by some ingenious process, the writing table into a reading desk. If some educator who is endowed with the proper inventive mechanical instinct will present to the public a simple and successful device which shall easily and thoroughly make this transposition, so that the new desk shall hold the book at the right distance from the pupil's eyes, at the right height and at the right slant, at the same time inclining him—in fact, compelling him—to sit upright in a natural and healthful position, he will be a public benefactor.

Is it not strange, that, with all our committees of ten and of fifteen, we have never had a committee of experts on school desks and seats in our country. If the school men, the doctors, and the manufacturers of school furniture could be induced to work together for this end, this valuable invention would not long be delayed. Dr. E. M. Hartwell, in a recent report to the Boston School Board, says:

The failure of American manufacturers of school furniture, hitherto to keep pace with their European *confrères* seems largely due to the fact that they have received but little aid and stimulus from the studies and recommendations of American surgeons, oculists, mechanical engineers, and school officials; all of whom have devoted comparatively little attention to the problem of school seating.

Several devices of this kind, none of which have proved quite satisfactory, have already appeared. The Chauncy Hall desk, in Boston, has been in use in that school for twenty years or more. Dr. Hartwell, in speaking of this desk, says: "Though a marked improvement on its predecessors, and most of its contemporaries, it has had little or no effect upon manufacturers and inventors, and seems to have been absolutely ignored by school authorities."

A desk of peculiar construction has also been in use, in the English and Classical School at Providence, more than twenty years, and has been regarded with favor by those who have seen it. This desk has a box and lid, and the top conforms in appearance to the ordinary high school lid-desk. When it is to be used for study the lid is trans-

formed by a simple but ingenious device into a book rest. The lid, which is raised in the ordinary manner, is cut into two parts by a break, crosswise of the desk, with hinges underneath. Let the lid be raised and the front part doubled downward till it strikes the top of the desk. A little book rest from within is moved upward into place, against which the lower edge of the book is placed. The front part of the sloping lid holds this book in its proper position, at the right distance from the eye, the right height, and at the right slant. A simple edge upon the book rest holds the leaves back. The pupil is inclined, for his own comfort, to sit upright, his back properly supported by the back of the chair, his feet squarely upon the floor, his hands at liberty to turn the leaves, and the book is invariably held in the best position for the healthful use of his eyes. It is but fair to say that the school heretofore mentioned, where, after four years' experience, the oculist found the condition of the pupil's eyes improved, was supplied with the desks here described. Both of these desks were made for the special schools indicated, and have never been placed upon the market.

SCHOOL SEATS.

The ideal school seat has not yet been invented. None of the seats or seat backs in common use today are unobjectionable. One which is largely used is much like a piece of a settee sawed off and placed upon iron supports. In this case both seat and back are unsatisfactory. Another style in quite general use may be described as a piece of plank hollowed in the middle, to which slats are attached for a back and which is supported upon an iron pedestal. Possibly this one, properly constructed, is the best seat we have today; that is, it is the least objectionable. It is to be hoped, however, that somebody will improve upon this before long.

In the old times the shoemaker was accustomed to sit upon his bench the whole day long. The bench seat was of very simple construction. A large round hole was sawed out of the plank which formed the bottom of the bench, and this opening was covered by a piece of strong leather. Perhaps this shoemaker's seat was the easiest and best that he could have. At all events, it has come down to us from past ages, and no improvement has ever been made upon it.

PROGRESS ALREADY MADE.

While it must be confessed that in matters of hygiene and sanitary arrangements we have not made the advance which is so apparent in various other directions, and are in many respects far behind some of the countries in Europe, it must not be supposed that we have made no progress. Some of the criticisms made in this report are more particularly applicable to one section of the country than to another.

The hygienic conditions in the new cities of the west are far better than in the older cities of the east. Indeed, it is difficult to make such a report as this fit equally well every part of a land so broad as ours is. But it is to be feared that too large a part of the evils herein mentioned are not confined to one section only, but need to be observed and remedied everywhere.

The American Institute of Instruction was organized in 1830. Francis Wayland was its first president. At its first meeting Mr. William J. Adams* read a paper on "The Construction and Furnishing of Schoolrooms." In it he says:

The most modern construction [of school desks and seats] appears to be that of detaching the seat occupied by each pupil both from the desk behind and from the other seats, the desks thus remaining continuous as before. The seats are made without backs, and behind them is a passage for walking. In this way each child is insulated, is perfectly accessible, and can leave his place at any time without interrupting his classmates. This arrangement is favorable to the coolness and general comfort of the pupils, as well as to the preservation of order. Each seat should be about eight inches distant from the next in the same row, and the passage behind should be twelve inches wide. The seat itself is from a piece of plank nine inches by twelve, with the corners rounded off, and nailed upon a firm pedestal; or it may be simply a box without a cover, made to stand upon one end and fastened to the floor. The open side is in front, and within it is a hook for hanging a hat.

To the plan just described there is still one objection, namely, the want of some support for the back. This want may be supplied by the upward continuation of the board which forms the rear of the box, perpendicularly, so as not to encroach upon the passage behind, and so low as to reach only the hollow of the back of the child, without touching the shoulder blade.

Let us be thankful that we have made some advance upon the conditions of 1830.

In reference to the distance between the back of the seat and the desk some progress has been made. In 1839 influential writers in England recommended that the edge of the desk be three inches in front of the edge of the chair, but even before that time Dr. Alcott of Hartford, proposed separate desks and chairs, and that the chairs should be "set at a zero distance for each pupil;" that is, the front edge of the chair should be directly under the edge of the desk. A few superintendents and school directors can now be found who have learned that for younger children the edge of the desk should overlap the front edge of the seat. The thing to be looked after is the distance between the back of the chair and the front edge of the desk; that is, the space where the child is to sit, and it is of very little account about the plumb line of the desk edge and edge of chair.

*Mr. Adams, at a later date, was conspicuous as the only one of the thirty-one Boston masters who refused to sign the famous document attacking Horace Mann's "Seventh Annual Report." He was master of the Hancock School.

Ordinarily the chair (for younger children) will extend a few inches under the edge of the desk.

Separate desks and chairs were first introduced into this country in 1848. Their first use was in the Quincy School, Boston. When Dr. Edward Everett Hale was a pupil in the Boston Latin School, "All the seats were of the same height, for boys six feet high or for boys four feet high." Dr. Hartwell asserts:

It cannot be denied that municipal sanitation and school hygiene are more highly organized and successfully administered in the leading cities of Europe than in the leading cities of America. Indeed, school hygiene has no place or standing among the arts and sciences in America. There appears to be no department of public health so miserably endowed, so incompletely organized, so well-nigh universally neglected by publicists, scientists, and publishers, as school hygiene. * * * The public schools are organized, maintained, and regulated by the state, which clearly owes it to itself to take adequate measures to prevent the school population from contributing to the spread of epidemic diseases, and thereby endangering the public health. * * * The school boards as at present constituted and teachers as at present trained for their profession are unequal to organizing or administering a genuine and effectual system of school hygiene such as the times demand in city schools. Experts in medicine, sanitation, and hygiene are necessary—nay, indispensable—for such a purpose.

He further says:

If the public health is to be effectually guarded, the schools and those who frequent them should be subject to inspection by properly trained representatives of the board of health, which board should have a voice in the selection of school sites and in matters relating to drainage, plumbing, heating, lighting, and ventilation of schoolhouses.

Frequent quotations from Dr. Hartwell have been made in this report, both because he is excellent authority upon these matters and because he has given, within a few years past, quite as much attention, perhaps, to the topics here considered as any man in the country.

It is very clear that some progress has been made in recent years in matters of plumbing, heating and ventilation. This improvement, however, is principally confined to new school buildings, while the ancient schoolhouses, as has already been said, are decidedly in the majority. Has not the time fully come when municipal governments should establish a careful system of medical examination in the schools? This has already been done in at least one instance.

On the 1st of November, 1894, the city of Boston first introduced into this country systematic medical inspection of all the schools. A few cities in Europe had previously begun this practice. Since November, 1894, Boston has employed forty-nine physicians who, in person, visit every schoolhouse every day in the year when the school is in session. If any cases of illness appear, especially any suspicious of infectious or epidemic diseases, the pupils are sent by the teacher

to a separate room in the building to be examined by the physician in charge. There is no interference with the family physician. Sick children are sent home by the teacher. Objectionable diseases, defective hearing and eyesight, receive their proper attention. The physician reports daily to the board of health. There has been, thus far, no difficulty in securing good talent for this purpose at a small salary. Each physician is paid for this service merely \$200 a year. The work is considered as new, popular and scientific. Many old physicians become interested in this kind of service as a matter of scientific study. During the first year's experience 9,188 sick cases were examined by these physicians, of which 5,053 were of throat troubles. One thousand seven hundred and forty-five sick children were sent home from the schools, 1,466 cases required the attention of the family physician, and 437 cases of contagious diseases were found.

This new method of medical inspection of the schools has already proved important in preventing the spread of contagious diseases, and has been a great relief and aid to the teachers in their oversight of the children. Dr. Durgin, the chairman of the board of health of Boston, is enthusiastic in his approval of it. In a recent address he referred to the dust "which for years had been accumulating upon the floors of the schoolrooms," and he added that "good air and cleanliness are so lacking as to be abominable."

It is customary in many colleges, universities, and academies, to have a resident physician, who, in all cases, should be an expert in matters sanitary and hygienic. In this custom we are merely following English precedents. The last number of the London *Journal of Education*, in speaking of school doctors, says:

The head of every school knows how much depends on the school doctor, on his skill to detect disease and sagacity to know when strong measures must be adopted. But no schoolmaster can know what such ability has saved, for it requires medical knowledge even to guess at "what's prevented." Many heads of schools, moreover, do not realize how much it rests with them and their system to determine what opportunities of prevention the school doctor shall have.

The same article quotes from Dr. Dukes, who for a quarter of a century was the physician at Rugby School, as follows:

During the whole of the twenty-five years I have been physician to the Rugby School I have visited, with the utmost regularity, every boarding house where the members of the school reside, starting at exactly the same time (8:15 a. m.) every week day during every term, and on Sundays at 8:45 a. m. The members of the school are housed in nine boarding-houses, and the number, varying from year to year, gives an average of just over 400; at the present moment there are 500. In consequence of this regularity, and by the use of a little moral persuasion, both with regard to each house-matron and the boys themselves, I am usually able to see the beginning of all illnesses; in fact, I

doubt whether anyone, except where the same system is in force, has ever had such a unique opportunity, amongst such a number, and extending over so many years. I am continually instilling into the matrons and the boys the importance of my seeing invalids in the very earliest stage of not feeling well, hours before one can definitely diagnose the ailment which is causing discomfort.

CONCLUSION.

The preceding discussion by no means covers the whole ground of school hygiene, but is designed merely to call the attention of this Council to several important defects in the present working of our school system, and to suggest concerted action along a few lines only, looking toward a remedy for existing evils. Your committee would therefore beg leave to make the following suggestions:

1. It is high time that the authorities in the large cities should inaugurate a system of expert examinations with reference to the hygienic and sanitary conditions of their city schools.

2. We would respectfully represent to the several state departments of public instruction that, in our judgment, such departments can render no better service than by causing to be made, by a competent commission, wisely appointed, an exhaustive report upon school hygiene, to be widely circulated, and giving to the community information universally needed. Such a report should be the result of the most careful study and inquiry into the various questions constantly arising concerning school sanitation and hygiene; and it should give due attention to the wants of both country and city schools—large schoolhouses in towns and one-room buildings in rural districts.

3. We would urge, with strong emphasis, the leading manual training schools, technical schools, and universities in our country to incorporate into their courses the careful study of school sanitation and hygiene.

4. Your committee would further distinctly emphasize the importance of more extended instruction for the teachers of the public schools of our country upon this subject of school hygiene, such instruction to be particularly given in teachers' institutes, summer schools, and normal schools.

5. The best results will not be accomplished until cities shall extend the proper power and authority and place the needed responsibility for better results in these directions upon the city superintendents.

WILLIAM A. MOWRY, *Chairman.*

FRANK A. FITZPATRICK,

MARY E. NICHOLSON,

JOSEPH BALDWIN,

C. B. GILBERT,

Committee.

REPORT OF THE COMMITTEE ON CITY SCHOOL SYSTEMS—THE BUSINESS SIDE OF CITY SCHOOL SYSTEMS.

BY AARON GOVE, DENVER, COLO., CHAIRMAN.

This committee has twice since the organization of the Council presented reports relative to the business conduct of city schools. It should be understood that in the preparation of this, the third report, only cities of 200,000 people, or less, are in mind. Such differentiation of administrative duties becomes necessary in the fifteen cities in our country of over 200,000 people that for that class of cities a special consideration is necessary.

Faith in the American common-school idea has become so vital a part of the character of the people that to the schools themselves the greatest concessions have been made. Devotion to them is most earnest, and promptly develops into violent antagonism upon any appearance of attack. School laws are enacted and approved which give tremendous power to school boards, upon the theory that intelligent, honorable, and honest citizens are to be members of the directory. Such power has been given to no other department of public government, except possibly to the higher courts of justice. This unprecedented confidence which the people have placed in a representative executive board, with accompanying great powers in financial and educational matters, has brought about the common-school systems of our larger towns and cities a horde of camp followers, impecunious politicians, adventurers and reformers, who, cormorant-like, would appropriate all to personal use, regardless of public weal. In later years no measure in the social, political or financial world has been initiated in this country without an appeal in some form having been made for assistance through the instrumentality of the schools. As a result of this popularity hundreds of towns have enthusiastically incurred enormous school debts, and have given freely vast sums of money for the maintenance of this highly prized institution. Fortunate it is for our nation that patriotism takes so noble a form; but unfortunate is it for our communities that the manipulation of these financial interests is frequently delegated to selfish, ignorant, or unprincipled officials.

A consideration of city school systems, especially of those west of Ohio, naturally, then, demonstrates the fact that many of them are carrying a great debt, to meet the annual interest of which compels

an excessive direct tax levy. The expenditure of large sums of money for interest on loans directly hampers the school administration, and sets it in an unfortunate light in the community.

It is not the purpose of this report to call attention to the mistakes—to use no severe word—that have been made in assuming a great bonded indebtedness; but comment thereon may be instructive to persons who occupy positions of city superintendents of schools, and serve to remind them that an important duty connected with their position is a participation in the councils of those who direct the expenditure of public funds for common schools. The financial reverses throughout the country, which commenced in 1893, have sensibly embarrassed the administration of all public, and especially educational affairs. The prosperity preceding that time led, in many cases, to imprudent outlay—to extravagance—in addition to an expenditure which popular favor had already made too generous, if not lavish, in private as well as public matters.

The older Eastern towns can scarcely realize the conditions in the newer parts of the country with regard to municipal expenditure. Those cities whose streets are paved, sewers laid, public buildings completed, parks established, are so differently situated from cities in the Mississippi valley and West, where all these improvements are yet to be made and paid for, that any comparison between them with regard to school expenditure needs to be carefully considered.

The true basis upon which to calculate expense of public education is that of cost per capita per pupil; but it will be found that the mass of the people have little disposition to base their opinions upon figures of that kind. The popular mind gives heed, first, to the total amount of tax for all purposes; and, second, to the total amount of tax for school purposes. The typical citizen has little disposition or time to analyze the expenditure of public institutions. It is for the superintendent, then, to meet the people on this financial plane, and to be able and willing to explain the relations of one public fund to another.

It would seem that a reasonable limit should be stated for direct taxation for public schools. In undertaking to learn the amount contributed from their total wealth by the people for public use in different cities, one is met by the unfortunate and pernicious custom of extending inaccurate property-values on assessors' books—a custom which makes it difficult to establish a common ground for comparison.

One finds in Providence, R. I., the estimated real value of taxable property of the city to be \$169,000,000, and turning to the assessor's books of that city one reads that a direct tax is levied upon the same amount, namely, \$169,000,000. Were the tax-collecting affairs

of other cities in the country conducted in the same manner, comparison would be easy; but, unfortunately, while the statutes throughout the country, as a rule, require property to be assessed at its real value, the law remains generally unexecuted; and custom has declared that one-half, one-third, or even one-ninth, of the true value only shall be returned by the assessors. One city in Illinois has property to the cash value of \$50,000,000; the same property is extended on the assessor's books at \$8,000,000; as a result the public documents of that city show a tax levy the present year, for all purposes, including city, county, state and schools, of 9 per cent., while it will be noticed that it really is about 1.5 per cent. on the real value.

What most concerns the school authorities in rendering an account to their constituency is the relative amount raised by direct tax for schools as compared with the total amount similarly raised for all other purposes. Your committee find that in Peoria, Ill., the schools are allotted one-third; in Milwaukee, Wis., one-fifth; in Galveston, Tex., one-third; in Providence, R. I., one-sixth; in Cleveland, Ohio, one-fourth; in Denver, Colo., one-fifth.

One cannot form an intelligent opinion as to the causes of these great differences until the local conditions are comprehended and the amount of moneys received from other sources is ascertained. While the national grant for the support of schools in states west of Ohio has been munificent, the manipulation of it by legislation, ignorant and wicked—and one is as disastrous as the other—has produced results by no means satisfactory. Indiana has a state school fund of nine millions, Minnesota of twelve millions, Nebraska of fifteen millions, Texas of a still greater amount, and Colorado of less than two millions, and in each of these states the demand for direct taxation for the support of schools will, of course, greatly vary.

The purpose of this report will be largely accomplished if the attention of city superintendents is so drawn to their duty as to lead them to give intelligent counsel and insistent advice concerning the amount of money to be expended for schools, thereby modifying by increase or decrease the school tax levy in every department.

That superintendent errs who approaches the board as a partisan.

A superintendent of schools should occupy quite a different position from that of the congressman who appeals to the government for a special appropriation for the district which he represents, and retires with a gratified feeling of conquest when his demand is granted, regardless of other national interests. The superintendent's knowledge of the entire field compels him to refrain from occupying the attitude of a special pleader. He is bound to remember the varied interests, and he should avoid occupying such a position as will pre-

vent him from retiring with dignity when he fails to obtain that for which he asks. Indignation should be his, only when unwise or imprudent expenditures are advised; but never when appropriations are refused, even though the granting of them would tend to accomplish what he believes to be for the best interests of the schools. It should be his duty as well as his prerogative carefully to review the work of the architect; to be conversant with the money spent for supplies; to be consulted as to the location of the real estate purchased; to know the worth in the market of a teacher's services, and to approve the value thereof. It is not meant that conclusions should rest with the city superintendent; but that he should insist upon knowing what is doing by the constituted authorities and be permitted promptly to give expression, if occasion warrants, to condemnation of ignorance or imprudence. The pursuance of such a course of action will at first, with ignorant and prejudiced people, render his position of insecure tenure and make his office open to violent attacks from corrupt persons; but in the end it will redound to the prosperity of the schools, and so to the welfare and honor and influence of the school community.

The superintendents, in a number of cities, have been asked for an opinion as to what is a reasonable tax levy for the support of the schools—one which could give all returns that the most ambitious city would ask, and yet one to which people would agree. The replies have been singularly unanimous,—that upon a cash value of all the property in a community a tax levy of one-half of one per cent. on every dollar valuation would be abundant. A little calculation demonstrates that no community expends that amount legitimately on the conduct of schools, even including the erection of buildings in a rapidly growing city; and observations show that where the tax levy has been greater than this—and therefore excessive—there are to be found that recklessness and ignorance on the part of the school boards which, as your committee suggest, could have been corrected by the intelligent meddling of the superintendent.

Your committee believe that most of the embarrassments and retrograde movements in the public schools can be traced to unfortunate financial management. Nearly every American city is willing and can afford without embarrassment, to maintain and support the best system of schools possible. But no city succeeds in so doing save when every dollar of expenditure returns a dollar's worth of results. One can readily name cities which illustrate inadequate returns through imprudent expenditures.

Your committee points with emphasis to the older communities of the East, where the greatest amounts of money taken directly from

the pockets of the people, being spent for free schools, insure the greatest prosperity. The reports of the commissioner of education for the last twenty years will show, upon study, that those cities that pay the most money per capita for the free education of the people are the cities that are most prosperous in a material way.

In some cities, like St. Louis, where the school boards are elected by the people, the direct control of the assessment and collection of money for school purposes lies in the board, limited only by law; while in other cities, like Boston, the school boards are limited by the action of another body, usually the municipal government. In the first case the power and responsibility are greater and the tendency to abuse correspondingly greater. In the latter the power of the municipal government tends to check unnecessary and sometimes necessary investments.

While it is questionable at the present time which method of constituting boards is the better for schools, it would seem that the municipal government is, in the main, a wholesome check upon any dangerous tendencies towards extravagance of the school board.

The schools need all the advantages that must ensue from the study and knowledge of philosophy.

There is another side in this active American life, viz., the business side, which is emphatically a large part of our civilization; it may be gross, it may be too material for sentiment, but its existence stares us in the face and compels us to acknowledge its existence as one of the forces in social life; to this side we call attention. Too many young and vigorous cities are today resting or falling back in common-school interests on account of the lack of attention to the business conduct of their school systems. This must continue until the men best able from their position, knowledge, and office take a hand in giving direction to that essential aspect of the institution.

City superintendents occupy a middle ground. On the one hand are the experts, philosophers and thinkers, whose theories must precede any healthful progress. On the other hand are the people who make up the mass of the active forces of the community; ever ready and willing to trust to the philosophers, the men of thought among them, for the underlying principles of their educational systems, and both unwilling to investigate, and unable to appreciate, philosophical methods. Between these two are the superintendents; men who are giving their lives to the study of the practical side of this great interest; men who should be well aware of the business demands of the schools in their charge, and of the money needed from year to year to maintain them.

Occupying this middle ground it is the superintendent's privilege

to appropriate from the one side that wisdom, skill, and art which he learns from the students, the professors of pedagogical science; and from the other side those grosser, more material forces without which progress is hindered.

AARON GOVE, *Chairman*,
L. H. JONES,
ELLEN C. SABIN,
OSCAR H. COOPER,
N. C. DOUGHERTY.

DISCUSSION.

[REPORTED BY AARON GOVE.]

MR. B. A. HINSDALE—There are three or four points presented in the report on which I wish briefly to comment: In the first place, I think there can be no doubt that there has been a certain amount of wastefulness in the school expenditures in large sections of the country, particularly in the Western states. To a very great extent this wastefulness has been occasioned by what may be called the "boom spirit," which manifested itself in public education as it did in all other things, public and private. Many towns and cities in the West, in a spirit of excessive hopefulness, have expended extravagant sums of money with a view of promoting their growth. Sometimes enterprises of alleged public benefit have been parts of real estate speculation. Not infrequently have courthouses, jails, churches, colleges, schoolhouses, etc., been built, either where they were not wanted, or they have been built upon a scale that nothing in the experience of mankind would at the time justify. I have myself seen a commodious and costly schoolhouse in a small Indiana town, entirely out of proportion to any immediate or prospective wants of the community. In fact, the schoolhouse was so large that it was not even used for school purposes, but, for the time being, was tenanted only by spiders and bats. No doubt this is an example of what has been done in many other places, in whole or in part. How far the school board or school superintendent could have arrested the tendency to undue expenditure, is a serious question. My own opinion is, that if in this case the superintendent had attempted to stand against the current he would simply have been carried off his feet and have been swept down stream. No doubt, too, there has been a certain amount of dishonesty in many places in connection with school expenditures, just as there has been in connection with all other matters of a public character. At the same time that I recognize these facts, or what seem to me to be facts, it is still my opinion that the characterization of the recklessness of many school boards is over-rigorous or severe.

In the second place, the proposition that school expenditures should be regulated by a *per capita* rule seems to me to be preposterous. School expenditures must have constant reference, not merely to the number of people, but to what people are able to pay for the schools. In the state of South Carolina, for example, the average wealth *per capita* is less than \$400, while in the Pacific states it is more than \$2000. Such facts as these will declare themselves in the field of school expenditures; and not only will they declare themselves, but they ought to declare themselves.

In the third place, let us consider the question what the norm or type of school superintendent should be. Hitherto the superintendent has combined many vocations and performed many duties. This is the case at the present time also. Some superintendents attend more to the educational side, and some more to the business or administrative side of the work, and no doubt this will be true to some extent in time to come, and there is no reason why it should not be so. Still the question occurs: In what direction shall the main stream or tide set? Should the superintendent be more of a leader of his teachers and of the community in respect to educational matters, or should he be more of a business man or administrator? Those who are familiar with my ways of thinking on these subjects will not expect me to hesitate in deciding for the first of these courses.

Now, in the fourth place, in respect to politics: What has been said about politics relates to partisan politics, or politics as Republican or Democratic. No doubt Republican and Democratic politics have done harm in the educational field; at the same time my own opinion, based upon some observation, reading, and reflection, is that what may be called school politics has done, and is now doing, vastly more harm. It is not so much partisan politics, Republican politics, or Democratic politics, as it is the application of the politician's methods to school affairs. For example, teachers' positions are not infrequently considered spoils, and the spoils system is thus introduced into the public schools. In my view "School Politics" is the great devil that needs to be cast out.

MR. DUNTON—No man knows everything, not even a school superintendent, or a school committeeman. The work of conducting schools should be divided and properly distributed. The purely educational questions should be left to educational experts—to the superintending officers—and with power. Over these matters boards of education should have no control. Purely business matters should be in the hands of able business men who should constitute the body of school committees. With their department the superintendent should have little to do except to indicate what the schools need. The construction, heating, ventilating, lighting and furnishing of schoolhouses should be under the direction of an expert in this department. School boards and school superintendents are usually not qualified for the duties of an expert school architect. Millions of dollars are wasted and thousands of lives sacrificed, annually, because the structure and equipment of the schoolhouses are entrusted to men who do not know what is needed. As a condition of progress we must learn that a mere election does not qualify one either to direct education or to furnish the proper conditions for its pursuit. The functions of committees, superintendents, and architects should be differentiated to a greater extent.

DEPARTMENT OF KINDERGARTEN EDUCATION.

SECRETARY'S MINUTES.

FIRST SESSION.

BUFFALO, N. Y., July 8, 1896.

The first session of the Kindergarten Department, National Educational Association, at Buffalo, was held at Temple Beth-Zion, Wednesday, July 8, 1896, at 3 p. m. The meeting was opened by Mrs. M. J. B. Wylie, president of the Buffalo Kindergarten Union, who introduced Miss Amalie Hofer, the department president.

A brief address of greeting from the President followed.

The first paper of the afternoon, "The Purpose of the Story in the Kindergarten," was by Miss Sara E. Wiltse, West Roxbury, Mass., Secretary of the International Kindergarten Union.

This paper was discussed, by Miss Frances E. Newton, of the University of Chicago Settlement.

The second paper, "Child Study For Fathers and Mothers," was given by Professor M. V. O'Shea, of the School of Pedagogy, Buffalo, N. Y.

Miss Anna K. Eggleston, of the New York State Board of Public Instruction, discussed the paper.

The President announced the absence and tendered the regrets of the Vice President, Mrs. Susan S. Harriman, of Providence, R. I., and the Secretary, Miss Wilhelmina Caldwell, of Denver, Colo., and appointed Miss Ella C. Elder, of Buffalo, N. Y., as acting secretary.

Announcement was made of the kindergarten headquarters at the Woman's Educational and Industrial Union, to which place visiting kindergartners were cordially invited.

Further announcement was made of a reception to visiting kindergartners, tendered by the local kindergartners, to be given on the evening of July 8th, from 9 to 11.

An address followed on "The Children of Our Cities," by Miss Mary E. McDowell, of the University of Chicago Settlement.

This address was discussed by Professor Earl Barnes, Leland Stanford Jr. University, Cal.

The following committees were appointed:

Nominating Committee:

Mrs. Ada Marean Hughes, of Toronto, Ont. Miss Jessica E. Beers, of Buffalo, N. Y.
Miss Frances E. Newton, of Chicago, Ill.

Committee on Resolutions:

Mrs. Eliza A. Blaker, of Indianapolis, Ind. Mrs. Emma A. Beebe, of Chicago Ill.
Miss Sara A. Stewart, of Philadelphia, Pa.

Meeting adjourned until Thursday, July 9th, 3 p. m.

SECOND SESSION.—THURSDAY, JULY 9, 1896.

The second session was held in Temple Beth-Zion on Thursday, July 9th, at 3 p. m. The first paper was presented by Professor S. H. Clark, of the University of Chicago, the subject being "The Psychology of Descriptive Gesture."

This was followed by a paper on "Allies of the Kindergarten Movement," by Miss Caroline T. Haven, of New York City.

This paper was discussed by Mrs. Fannie Schwedler Barnes, of New York, Miss Newcomb, of Fredonia, Miss Laws, of Toledo, and Mrs. Hughes, of Toronto.

In the absence of Mrs. Ellen M. Henrotin, of Chicago, who was to have given a paper on "Organization, a Social Ideal, an Educational Ideal," the time was occupied by President G. Stanley Hall, who explained his "Kindergarten Syllabus of Child Study" and urged that kindergartners answer the questions therein proposed. Mrs. Hughes made a brief presentation of the claims of the International Kindergarten Union, and the advantages of membership therein.

The last paper of the session was by Miss Bertha Payne, of Chicago, the subject being "Problems of the City Kindergarten."

The report of the Committee on Resolutions was presented by the Chairman, Mrs. Eliza A. Blaker, as follows:

Resolved, That the officers and members of the Kindergarten Department of the National Educational Association express their sincere appreciation of the hospitalities extended by the local committee, by Miss Tuck, of St. Margarets School, and by the residents of Buffalo. We also wish to acknowledge the welcome given to this department by Mrs. M. J. B. Wylie and the members of the local kindergarten committee. To the Buffalo press we are indebted for careful reports; to the trustees of Temple Beth Zion for the use of their beautiful rooms; to Miss Ella C. Elder for supplying the place of the absent secretary in so able a manner; and to the directors of the Educational and Industrial Union for the use of their convenient and delightful house for the kindergarten headquarters.

Resolved, That this department recognizes the importance of mothers' meetings and classes, not only as a part of the private, the public, and the free kindergartens, but as an essential factor in the work of the primary grades of the public schools.

Resolved, That the consideration given to child study and kindred subjects is of the utmost value, not only to kindergartners but to teachers and parents.

Eliza A. Blaker,
Emma A. Beebe.

The report was unanimously adopted.

The Nominating Committee submitted the following report:

For President, Miss Caroline T. Haven, New York, N. Y.

For Vice-president, Miss Ella C. Elder, Buffalo, N. Y.

For Secretary, Mrs. M. J. B. Wylie, Buffalo, N. Y.

This report was adopted.

Notices were read of a meeting of the International Kindergarten Union at the Women's Union on Friday, July 10th, at 9 a. m., and of the conference of Kindergarten Supervisors at the same place at 9:30 a. m.

Miss McDowell urged, in response to Miss Payne's paper, that kindergartners demand public playgrounds for the children and some live stock for the playgrounds, to familiarize city children with the common domestic animals.

Mrs. Mumford, of Philadelphia, told of the opening to the children of the schoolyards in her city, and their supervision by kindergartners.

As her closing words to the department, the retiring President made an appeal for the Elizabeth Peabody Memorial.

It was moved and seconded that Miss Haven and Mrs. Hughes draft resolutions expressing the sympathy of this body and a desire to co-operate in the establishment of the Elizabeth Peabody Memorial.

Meeting adjourned *sine die*.

ELLA C. ELDER, *Secretary*.

PAPERS AND DISCUSSIONS.

THE PURPOSE OF THE STORY IN THE KINDERGARTEN.

BY MISS SARA E. WILTSE, WEST ROXBURY, MASS.

In our consideration of the use of the story in kindergarten, I beg leave to emphasize the fact that the story is not used as an isolated part of kindergarten training, although in this paper I shall have to treat it as if the kindergarten were a sort of story mill. Its purpose, however, as I understand it, is the same as any one study in the later school life; not the imparting of facts or stimulation of fancies for their own sake, but for their value in character building. The story has been used from time immemorial, consciously or unconsciously, in the training of citizens as such, or the instruction and entertainment of children and adults alike. Educators have always differed and may always differ, about the kind of story that should be used just as doctors disagree about the treatment of disease; but it is a blessed relief to believe that none of us can do our will in all these things for there is a boundary of individualism in the soul of each child over which neither we nor our story can pass. When I hear teachers lament that attention is so difficult to keep, I often give devout thanks that children are thus clad in the very armor of God, which renders them proof against some of our assaults. We should not abate our efforts nor wrap ourselves in any mantle of irresponsibility, but having done our duty conscientiously we may rest our hearts in the conviction that He who gives the increase has made some provision against the worst mistakes even of Paul and Apollos. But for this saving faith I might head a crusade from Buffalo this very day to go out and destroy half the story-writers in the land if, indeed, I did not first consider the motes and beams in my own eyes and straightway hang myself. I am optimistic, however, and believe we shall find the Path Beautiful in education, through the story, if we turn our attention in future to the children first and then to the story.

The main obstacle in the way of the teacher of literature in the higher grades is in the crippled imagination of the children, and in the dry hearts of the teachers. We are falling into shorthand methods, and if dry rot has not touched literature itself, it has attacked some of the teachers even in kindergarten. Let us go back

to the life-giving myths, though some of us will need to bathe in that Jordan seventy times seven times before we are fit to say to any little child "Come, let me tell you a story." I believe we should use the historical method in telling these stories, saying not only "once upon a time," but once upon a time people believed, or some people still believe.

I have been observing grammar school children, and I found an attractive girl who had passed from a day nursery to a kindergarten, and through the primary school to her second year in grammar school who had no more poetic notion of the starry heavens than that afforded by a piece of blue calico with polka dots. I feel that every teacher who had this child under her influence missed an opportunity for conferring upon the child the highest good. Let us rebel against routine, if routine is to blame; against our own apathy if that is responsible, but let us not impute it to the child. We built our blocks over her head in kindergarten, befuddled her brain with books in school, and robbed her of her birthright in the sacred name of a public school education.

Science, with its inexorable laws, its fascinating presentation of eternal truths, has almost throttled our legend, and for a time benumbed our poetic instincts; grammarian fiends would throw out idiomatic forms of speech; sticklers for fact who cannot see that truth is larger than fact, would confine us to the barest statement of historical events or scientific data; even the story teller would chop a classic myth into mincemeat for an exercise in reading; reducing literature to the old-time primer sentences based on the worn out text, "I see an ox." Even the advance-guard of our educational army would make a mistake, if through a study of children's favorite stories they should send out many books like those interesting ones recently published in San José. We need to keep in mind the mistakes so recently made by medical men, who went mad on the subject of sterilized milk, and too strongly condensed foods, by which babies died of starvation before we learned that the Creator made no mistake when giving us digestive organs that could dispose of some waste material. I wish, however, to devote the remainder of this paper to the consideration of myths and fairy stories.

The word "myth" meant all that which educates the sentiments as over against the word "logos," which meant science and reason. Its purpose now should be to give sympathy with nature. Mythological heroes are nearly all personifications of heavenly bodies, clouds, winds, water, trees, and flowers. Its foundation is the unity not only of all life, but of all existence with which it seeks to bring the soul into sympathetic relations. Its personifications and animisms lay the

deepest of all bases for science, art, religion and literature. These all, as Vignoli has well shown, are but refined and developed forms of myth. To seek to inculcate love of these without that deep feeling of unity with all that is the special function of the myth to develop, is to work handicapped with a constant advantage. The best of these old superstitions lie so near and warm about our hearts that they give an interest which nothing later can possibly supply. Better even, the lowest form of superstition than the sterilizing gradgrind doctrine, that recommends nothing but exact and literal facts for children.

But while I have strong convictions about their use and abuse, I beg you to hear them with unbiased judgment, for I pray to be delivered from the danger that besets every kindergartner who has strong, and, for her individual work, necessary confidence in her own way; her danger being that she may grow dictatorial and impose her notion upon some younger teacher who is as divinely commissioned as herself to find a way or make it. Nevertheless, I hold my opinion so tenaciously that I shall try to have you adopt it, not as mine, or because I have grown to it through years of experience, but because your own thoughtful study of children first, and the story second, makes my theory your very own.

If we find that any story in our sacred book produces fear in a degree that endangers the health of a child, if we find a story, I care not who invented it or how long it has been preserved in folklore or in print, that tends to weaken personal responsibility for one's own acts, if we know a story that tends to give false notions of life, like a belief that one may be idle or tricky, and some well-disposed fairy will aid the lazy or shield the trickster, if we have a story of an angelic child that is oppressed and downtrodden by a stepmother who represents all feminine vices, I am convinced that we have no right to use such stories for any purpose whatever in our training of children. I know that even such an authority as Miss Blow defends the presentation of evil, as she says, to offset and accentuate the good, referring to Goethe, Dante and Milton, to support her theory. The fallacy of this argument for introducing the child to Mephistopheles and Satan seems apparent. Neither Dante, Milton, nor Goethe wrote for children of kindergarten age, and to force a child out of childhood in moral life to any contemplation of evil acts that belong to a later stage of development, is as harmful to its proper moral development as it would be to its physical growth to feed it on the pastry and salads that its father may eat.

Froebel emphasized doing, doing, doing. The child must grow into moral manhood very much as he grows to the physical stature of a man. We should only make him ridiculous, perhaps, if we clothed

him in his father's dress suit while he should yet wear kilts, but who can estimate the injury done a child by boosting him up the tree of knowledge before he can safely stand alone.

There are sins that beset the child, as there are temptations peculiar to youth, and others that only threaten us in more mature years. The mistake we too often make is in projecting our moral struggles into the lives of the children, insisting that they shall fight our foes, while those that assail their tender souls are ignored or even laughed at.

Take the myths, for instance, that fill the childish heart with terrors more or less definite. In his admirable book upon the Psychology of Fear, Professor Mosso says: "The one who brings up a child represents its brain. Every ugly thing told to the child, every shock, every fright given him, will remain, like minute splinters in the flesh, to torture him all his life long."

Fear is one of the most elementary emotions, its manifestations in the infant are studied today and compared with what we know of the mind of primitive man, and physician and psychologist alike tell the mother to protect her child from all unnecessary fears as she would guard him from contagious diseases. Every child comes into the world with a pack of inherited fears that manifest themselves in starts, cries, and shudders that are a constant menace to sleep and health. Weak and inefficient parents have always used these fears to supplement their authority, and few, even among the educated, but must plead guilty to some cruelty in the use of fears in family government. One can have some patience with an overworked, ignorant mother, who gets obedience from her children by threats of the bogymen, or the police, but what can be said in defense of a kindergarten who tells the story of Little Red Riding Hood to any child as a help in its training to obedience? I have heard it defended because students of mythology have settled its place in literature as a sun myth, but why it is any less harmful on that account is not clear to my mind.

Let us see, however, of what use it is in enforcing the moral law of obedience to parents. I have found children of ten years liking it because of the red cloak and hood of the fair-haired girl. Others like the final rescue of the girl, and seem to forget the grandmother. I have not been able to discover any of the value attributed to it by adults.

As for my own childish lesson from it, there is everything to regret and nothing to remember with pleasure. From it I received my first fear of an animal from which I was in no danger whatever. Worse than this, however, I took an unreasoning and unconquerable fear of an inoffensive and affectionate old woman whose front teeth

seemed to me to have been accurately described by the author of the story, who, I supposed in the innocent optimism of childhood had taken this way to warn me of a dangerous creature which might at any moment become a wolf to devour me. Previous to this warning, I had slept in this woman's arms many a night, but when I had tasted the fruit of the tree of knowledge, childlike, I refused to tell anyone of my newly acquired wisdom, but suffered in silence as most children do, for some as yet mysterious reason. I must do my parents the justice to say that the story was not used by them in this attempt to train me in the way I should go. I do not condemn the story for older children, who are healthy in body and imagination, but I would reserve it, and all like it, until the child can understand some general historical sketch of the growth of myths.

I know some educators object to any deviation from the ancient form of all these stories, arguing that time, which has preserved them, has thereby set its seal upon their worth, and it is not for the individual to assume a wisdom greater than that of the race. One of the wisest moral teachers of the present day says it is a kind of laziness that prevents people in general from close weighing of even Bible stories with moral scales, it being easier to accept or reject in a wholesale manner, than to sift and discriminate.

Those who defend giving stories of bloodthirsty giants and horrid ogres, tell us that evil is always set over against the good to enhance the brightness of virtue; the vicious stepmother is thus defended on the ground that she represents evil, which is a sort of stepmother of the soul, and not a blood relation; but such symbolism misses its point and deepens a prejudice that sadly interferes with home happiness. I have known mature women who confess that they hated and defied their stepmothers because they had gathered from fairy stories that stepmothers were the invariable enemies of children.

Those who cry most loudly for the preservation of the ancient myths intact, seem to forget that when they were accepted as national literature, and were being made, they were the property of men and women, and not relegated to the nursery, if one may be allowed to use nursery to represent a stage of life in primitive times. We can trace the descent of some games, showing that children now play what young men and maidens played a century ago, but this is not as harmful as to give the babies stories just as they were told by men to men in olden times.

There is a safe rule of judgment about any story, ancient or modern. If it contains anything calculated to induce fear in a little child, do not use it. Even if fear is good for exceptionally sluggish children, like whipping and hell fire (which I do not for a moment admit), the

majority of modern, and especially city-bred children, have nerves too highly sensitized for such severe tonics.

I know some one will say: "But the children dote on blood-curdling stories and love to shiver!" True, but only so far as they are perverted in taste and unhealthy in imagination, and such inclinations are no more to be indulged than an acquired taste for alum, quinine, and soda, such as recent studies of children's appetites show some of them to possess.

It is without doubt true that fear in some degree is needful to mental growth, but we need not attempt to supplement providence in a distribution of fears sown broadcast into the lives of the children, whom it is our sacred duty to protect as far as possible from the mistakes of our honored progenitors. Wisdom may have begun with them, but I for one, am not willing to believe it died with the last myth-maker, any more than it is best preserved by the savages of darkest Africa.

Why should not the kindergartner avail herself of the latest studies in the language of the children, and add wisdom to insight by giving play to the organs of speech in Mother Goose Rhymes, Lear's Nonsense, and Riley's inimitable Rhymes of Childhood? At present we are in error, I believe, in our language lessons, prostituting our stories instead of letting them minister to growth in all directions. We need more pure fun in kindergarten, we need to work with nature through the story instead of against her, letting the children's tongues play with our approval instead of tying them with rules of grammatical construction, and then listening at keyholes, wondering why children never chatter like that when we are about.

The latest study of children's ideals, temptations, and fears, emphasizes the great moral value of St. Paul's injunction: "Whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report; if there be any virtue and if there be any praise, think on these things." It is good to remember that St. Paul added in the next paragraph a good pedagogical rule, viz.: Do these things.

DISCUSSION.

MISS FRANCES E. NEWTON, Chicago, Ill.—I have not ceased to wonder why our honored President appointed me to lead in this discussion, for she definitely knows my point of view upon this subject; and being wise in her day and generation must also know Miss Wiltse's point of view, and, therefore, that there is no chance for discussion, if discussion means opposition; for I agree heartily with nearly all that Miss Wiltse has said. There remains nothing, therefore, for me but to emphasize one or two points which she has made.

In the matter of the revision and adaptation of stories, I would suggest the need of great care, lest we, in adapting the outward form, touch that of which the myth is but the expression—the life principle, that essential something which was born in the experiences of generations of people, and which we can no more revise than we can revise our own souls—our own inner, essential, immortal being. We cannot dilute a life principle, as the high-potency doctors do their medicines, and make it harmless for the child; we can only wisely select the myths in which the child can see his own experiences pictured—the cause and effect of things—and then give them to him in the broadest, most graphic way as he himself would tell them or as he would draw a picture giving just the barest outline without high light or low light or shading. We may develop the story as he adds to his picture objects and incidents; and this process may be followed for months and years until he is old enough to comprehend the beauty of the myth as a whole or consciously recognize therein not only his "pygmy" but also his "colossal" self. It seems to me that this is the only legitimate adaptation or revision of our world-old stories.

I would also plead with you, as has Miss Wiltse, for more of this time-proven, eternity-stamped literature, and for less of the puerile sentimental stuff which is foisted upon the souls and minds of little children which is not only an insult to their dignity and divinity, but is degrading to the man or woman who does it. The people who write it need to sit for awhile on some majestic mountain peak alone with a little child and learn of God and him what a child's soul is and that we never can talk *down* to it.

Now just a word about the purpose of the story which, perhaps, Miss Wiltse has not brought before us definitely, her paper having dealt mostly with the kind of story we should tell. There may be many purposes according to the circumstances at the story-telling time; but they may all be summed up in one purpose, namely, to quicken into activity love which is life, that life which is more than meat, whether it be for body or for brain; that life which knows itself—an eternal thing; that spiritual love or life which never can conceive of decline or decay of individual or nation, such as is being talked of in another department of this congress, but which grows conscious continually into an ever-achieving, ever-widening existence. The purpose of the story is to quicken into activity that love or life which feels itself one with all life, past, present, and future; with nature, humanity, and God; and, feeling it, gives expression to it. This love, I take it, is not a sentimental something confined to words—a sort of cant, wrongly supposed, oftentimes to belong to Sunday schools and churches, to philanthropies and religion. It is the most practical thing alive, adding graciousness to life, and joy and purpose to being, and in the activity of which we find the only

true development of that thing talked about so much—character. The men and women of character are the men and women who actively love, and in so doing have apprehended an amount of life, of vitality, of virility, that the man without love knows nothing about, and, what is worse, does not know that he knows nothing about it. This is the purpose of the story, I believe, as well as of all other educative materials, and must be the test of their educative power. Love is the fulfilling of the law in all departments of life—self-sacrificing, self-renouncing, consecrating, aspiring love. In the matter of stories it only remains for us, after having chosen them wisely, and adapted them carefully, to take care that they fall not short of this great purpose, through the meagerness of our own lives in this respect.

I feel confident that Miss Wiltse will agree with me in this, and as I agree so largely with her, whoever wishes to oppose the paper in question will have two instead of one with whom to battle.

CHILD STUDY FOR FATHERS AND MOTHERS.

PROF. M. V. O'SHEA, SCHOOL OF PEDAGOGY, BUFFALO, N. Y.

I. Every day the wonder grows that such great interest and enthusiasm in child study should have overtaken all sorts and conditions of people in so brief a time. But one who is accustomed to delve into the past for an explanation of present intellectual and social interests will experience no great difficulty in tracing the roots of this marvelous growth of the last decade. Whatever else be characteristic of the age in which we live, it may at least be fairly said of it that it has the highest regard for the methods of inquiry, and the results of inductive science. The Baconian departure of a few centuries ago has stirred modern civilization to its very center. The father of induction thought to learn of the invariable processes of physical nature by the most careful, unprejudiced observation of her varied moods and manners. No statement should henceforth be made concerning her until it has been warranted by the testimony of manifold concrete examples. This method, which was at its birth applied only to the study of inorganic things and processes, was gradually extended into the realms of life, and the structure and function of living organisms became objects of investigation according to the principles set forth in the Baconian formula. Nor were the minds of men long satisfied with the study of creation as it was revealed to sight at any given moment; they must know how things came to be as they were, what experiences they had passed through in the earlier life history of the world; and, as the fruit of this relentless ambition, has grown the great principle of evolution, to the regard for which the whole scientific world is now committed. Yet one step further and

we behold this method of inductive, evolutionary science applied to the study of the human spirit, and the newest term for this most recent of intellectual interests is child study. We are looking these days with eager eyes to see how the individual human organism, body, mind, and soul, originates, grows, develops.

Child study, then, in a part of its meaning at least, is one manifestation of the abounding enthusiasm and faith that the world now has in inductive, evolutionary science. By this new mode of inquiry it is hoped to establish a substantial body of knowledge concerning the growth and development of human beings. Such a science would be so great a boon to humanity that every laborer who gives promise of usefulness is eagerly drafted into the service of fact gathering; and perhaps we should search the world's records in vain to find an instance when there have been so many volunteers to gladly labor in a new field.

It is, though, not so peculiar to child study that it is now passing through an era of great enthusiasm in the gathering of concrete and more or less isolated facts of every kind and quality. All branches of science have had a similiar experience, although most, if not all the older ones, while still in the inductive period, have yet their side of application to the affairs of daily life. Botany has contributed to the improvement of agriculture. Chemistry has brought rich treasures of knowledge to medicine, and has reached down so far, or perhaps up so high, as to put intelligence into the culinary department of our homes. Mathematics has utterly changed the features of mother earth with her engineering wonders. But when we ask what child study has accomplished that will make the life of the home happier and sweeter, and its training more intelligent and efficient, we are often told that it is too young to be of service to humanity, and that we should bide our time in patience and expectancy until it attains to the full stature of manhood. Meanwhile all who can labor must apply themselves diligently to building the foundation upon which this new structure is to be reared, and in the end it will stand, with others of its kind, as a treasury of goods for human needs.

We shall here regard all working people as separated into two distinct groups. In the one are congregated fact gatherers, theorists who amass data without great concern as to their immediate bearing upon any of the problems of daily life; while in the other we may find practical people, those who are responsible for making things go in right directions, and who are interested in facts only in so far as they can apply them to some definitely useful end. The botanist is a theorist, while the gardener and the farmer care about the science of plants only as this will teach them how to make the fruits of the soil more

luxuriant and abundant. It is a curious enough phenomenon, but one which seems to be true to our common nature, that the theorist cannot usually make things work—the botanist is not often the successful farmer; while, on the other hand, those who are considered competent agriculturists do not generally distinguish themselves as scientific men. In the realm of human growth and development the theorists or pure scientists include the biologist, the psychologist, and the economist; while those concerned with the practical direction of affairs, with the welfare and conduct of individuals and society, are the parent, the teacher, the minister. If the principle that the finest exponents of theory are not generally the most ready and skillful in its detailed applications were universally true, then it would be of no value to us here in designating the kind of child study that would be most beneficial for the parent. Without attempting an answer, now we may say in passing, at any rate, that its manifest wide application to the affairs of daily life constrains one to think it may also apply to the important topic which engages our attention.

II. The statement may be ventured here that a parent's relation to his child should ever be determined by the latter's future well-being, spiritual and physical, rather than by any present or future advantage of parent, church, or state; and, unfortunately, there sometimes appears to be an antagonism between these several claimants for recognition. In older civilizations than our own, children have been regarded from the standpoint of their probable efficiency in promoting the interests of the state; while in modern homes they not infrequently seem to be looked upon simply as playthings for the entertainment of parents and older members of the family, or, saddest of all, sometimes as burdens not gladly to be endured. With such attitudes toward children there is no paramount need to know how they most healthfully and wholesomely grow into perfect manhood and womanhood, each coming at maturity into inheritance of the full possibilities of body, mind and soul. But if the parent's duty be conceived of as solely to provide in the largest measure possible for his child's future welfare, spiritual and physical, we at once see a necessity for endeavoring to find out how this end may be attained in the most complete and satisfactory manner. In the hope of realizing this aim, some earnest parents, here and there, are attempting to study their children by the methods of inductive science, and there appears to be an increasing anxiety to undertake such work. It is thought that careful, unprejudiced, systematic observations on the developing life of the child will enable the parent to comprehend the nature of his charge more truly and deal with it more wisely. It is argued further, that the elaboration of a science of child nature demands the

co-operation of parents, since they alone are so circumstanced that they can furnish the required data.

But the question must be raised from the standpoint of science whether the parental and the pure scientific attitudes of mind toward childhood are in any way incompatible. Will the constant observing and recording of minute details of child activity without the intermixing of feeling, of emotion, between the items of the record, which science requires—will this make the parent more intelligent and efficient in the discharge of his great responsibilities? One consideration stands out in bold relief here, and its importance is testified to by the very constitution of nature and the course of history—that whatever other relations should exist between parent and child, they must at least always be united by bonds of deepest sympathy and affection. Beyond all else, and above everything else, the parent must be a moral guide; he must establish character and disposition, and that he may reap rich success in this he must not only bear infinite love to his child, but must ever claim sincere affection in return. This affection gives insight; it breeds patience and long-suffering and courage; it makes instinct more keen and certain; and no intemperate winds should ever chill its ardor or stifle its most frank and spontaneous expression. In no other way, by no other course, can the child mind and heart grow to be sympathetically, keenly responsive to the mind and heart of him who is to instruct and direct.

Now will continual watching with a scientific eye for the most subtle signs of expression in a child with the purpose to record faithfully and preserve without the creeping in of feeling or interpretation of any kind—will this be most congenial for the growth of that all-absorbing, unconstrained affection which the observer should have for the one observed? In the concerns of daily life, for the most part, pure science and rich, spontaneous emotion may not be seen walking hand in hand. The one does not nurture or develop the other, although in their essence there can be no antagonism. If it should be true in the affairs of the home also that the methods of pure science are not best suited to nourish parental affections, it will doubtless be discovered in right season by those worthy parents who are seeking to be scientists with their children; but it may not be out of place here to offer a humble opinion as to a possible source of disappointment which such study may entail.

Even when the parent has observed his facts scientifically, how is he to interpret them? What signifieth to one charged with directing the welfare and conduct of a child's daily life, no matter what it may mean to the scientist, this infinitude of seemingly disparate things in his development? Will it be possible to affect his moral growth

materially by taking heed of the most minute of them? Suppose it be granted for the moment that the parent's observations may be of possible use in rearing a science of childhood, still is not his first duty to train his individual child rather than be concerned with a science of any kind? And is it not significant that in other phases of scientific work it is frequently demonstrated that absorption in the details of fact gathering blinds one to a view of the entity, the life, the meaning of what he studies, and renders him incapable of ready action when occasion demands? It would doubtless be contrary to experience, though, to say that a parent's observation of his child must always lessen his parental affection, or paralyze his power of doing, but it would probably be true in the majority of cases where the observations are greatly beneficial that they are made primarily for the good of the child, and not for the promotion of science. The observer in the latter case will see his facts only in their meaning for the well-being of his child, and his personal interests will surcharge them all with richest feeling, with helpful interpretation.

And this seems to be the natural and appropriate vocation for the parent, and withal a most necessary and profitable one — to observe for the sake of interpretation that he may attain greater wisdom in shaping the conduct of an individual child. It follows, then, that he must eagerly seek all knowledge and power that will lead him to comprehend more clearly how childhood normally develops and that will make him ready and more skillful in the application of his knowledge to the upbringing of his own children. In this way he gathers information for the purpose of rightly guiding those for whom he lives, treating each according to his peculiar necessities; and he is not mindful of minutiae of every sort, but sees only the larger things that are really vital and that will enable him to judge wisely of the manner and temper of his training in special cases. There may be some grounds for fear in these days that too great concern with isolated and partial facts and opinions on the part of the parent, may be more detrimental than beneficial, to that ever-ready and spontaneous action which best becomes one who is in any way responsible for the training of the young.

III. Granted, then, that fathers and mothers wish to know, that indeed they must know, the large, vital facts in child development, and how best to become familiar with these? Now that science has turned its brilliant search-light upon human growth and development, we may anticipate, from day to day, the illumination of important truths that have never yet been revealed to mind or heart; and parents will be eager to know what these are as soon as they are clearly apprehended. It is most gratifying and encouraging to see that in all parts of our

land steps are being taken to accomplish this aim by the formation of parents' clubs and round tables, devoted to a study of the problems of training children; and it is through the medium of these organizations that a science of child study, as it shall be elaborated by specialists, may hope to receive interpretation and practical application in the homes of the land. To these clubs the scientist may bring his knowledge and the parent his problems, and the one should illumine and vitalize the other. Here the parent may learn what science has to say, from time to time, upon the large questions of child growth, such, for example, as nourishment, its physical, mental, and moral significance—its importance not only in building a sound, capable body, but also in giving form and shape to the disposition and character. How very, very sadly parents need instruction upon this topic. What an infinite blessing it would be to humanity if those who have the care of children would appreciate how largely the welfare of mind and soul, as well as body, depends upon the fulfillment of the laws of nature in the proper nutrition of brain and muscle; fatigue, its prevalence in home and school, its effects on mind and body, the causes therefor, the signs; the remedies, periods of rapid and retarded growth and the changes in mode of life which these necessitate; periods in which the different organs and powers of the body develop, and the injury which is often sustained by forcing development before the organ concerned is naturally ready for it; adolescence, the important transformations that occur during this period, and the modifications in training made necessary thereby; defective senses, the limitations, mental and moral, which these impose upon a child, the methods of detecting them, the remedies; play, the meaning of this divinely appointed agency for calling forth the powers of body, mind, and soul. Again, such practical questions, as practical for parent as for teacher, as, the at least partial parallelism between individual and race development, and the clear light this may throw upon the perhaps inevitable appearance of prominent traits of mind and character in the progress of childhood, from birth to maturity; children's expression through art in its various forms, through language, through physical signs, and the art of reading these skillfully; the native interests of childhood at different stages of development; imitation in childhood, and so on. These are only a few of the large topics which the scientist and the parent may most profitably study together; and if the scientist is not available, his writings may be a partial substitute. If there be no leader, who is so simply because of learning and experience, then individual members may be charged with the responsibility of each presenting a single topic, and it should be a duty as well as a privilege to find out all the best and richest thought upon any special

question. If this be freely and frankly discussed, and its practical, detailed bearing inquired into by all the members of the club, experience has shown that much substantial good will be reaped by every one interested. It seems to the writer, as it seems to others who have traveled widely in these fields, and whose opinions he has sought, that this is the character of work in child study most to be preferred by fathers and mothers. This will open the mind to important matters which simple, unguided instinct, however keen and perfect, must fail to discern; it will afford explanation oftentimes of unaccountable conduct in children which is a source of great grief to parents, but the causes for which may be removed when rightly understood. It will cause parents to deal with children as individuals, not as masses; and it is not too much to hope that it will save many a child from a wretched personal and social existence, because it will put into the hands of those who train the young, instruments to detect the causes for shortcomings and means for remedying them.

Another most commendable form of child study, and one which may be pursued with ease and profit in these clubs and round tables, has to do with the study of the leading principles of modern education, beginning with the youngest in the kindergarten and ending not short of the oldest in the grammar school. The parent should, by counsel and study with the teacher, seek in the spirit of a learner to comprehend what heights she is striving to attain in her daily instruction, and what difficulties and barriers beset her in her progress. Is it not a condition of things to be deplored that so frequently in our midst the home stands opposed to the school in its introduction of new means and methods into the class room? Ignorance here falls not far short of crime. Where the teacher should receive the most hearty sympathy and co-operation, she oftentimes now must be content with the exact reverse, and, meanwhile, the child is the principal sufferer. Let no one complain that the teacher is at fault because she does not take the initiative and constrain the parent's attention. Nature has set her limits to mental and physical possibilities in our constitution, and these are already reached by most of those who faithfully discharge the multifold duties of the schoolroom. By all the principles of justice and duty it is imperative upon the parent to seek in a sympathetic spirit to know what the teacher does, and why, so that he may be a source and fountain of aid and comfort rather than a cynic to chill by his indifference or kill by his criticism.

Again, if it be right to say that parental responsibility must be determined by considerations of the child's future welfare, then that kind of child study should also appeal to fathers and mothers which consists in so simple, but yet so important a matter, as to preserve an

account of those facts in the life of the child that will be of material interest and benefit to him in maturer years. Into this record should go those items that will be guiding maxims to the young voyager when the mapping of his course falls to his own hand and brain—such items as the diseases that may have overtaken him in childhood and youth, and any lingering after effects; outcroppings of ancestral traits; absorbing interests at different stages of development; leading traits of character, and matters of this kind. There need be no burden of details here, either, only the larger and more significant facts. For the most part the child should leave the parental roof with habitual actions so fitted to his nature, so appropriate to his special needs, and so firmly implanted within his being that they may be trusted to bear him safely along the right course in later life. But all of us come, now and again in adult years, to times when there is breaking up of old ideals and habits, when we are adrift at sea, and it is in such crucial places that this life-book may be a trusted friend and counselor.

IV. Our last question now must be: What responsibility rests upon the parent to aid in establishing a science of child study independent of the direct application of this work to the training of his own children? If lack of space and time will make a dogmatic answer pardonable, it may be said that even though such a duty rested upon parents the majority of them could not discharge it for the evident reason that they have not the necessary scientific training and attitude of mind. And, moreover, the labors of the majority of us are not needed to rear an inductive science of child nature, for a thousand Preyers left alone in their work will raise the walls of this great structure with more of peace and surety than if a million amateurs try their hand at it; and if the development of the race will really be promoted by such a science let us have faith that apostles in plenty will be brought forth in due season. It is auspicious to note already that there are those parents in our midst who, having the right constitution of mind and heart, and being favored with a happy combination of circumstances, have become genuine scientists in the study of their children; and to such the call will doubtless always appeal so profoundly that they will have no other wish than to cheerfully obey.

DISCUSSION.

PRESIDENT AMALIE HOFER.—It is interesting to notice that this sister to the kindergarten movement, the child-study movement, is joining hands with us in this work with the parents, with the father and mother. It was with a special purpose that we have brought up the discussion of child study for parents, believing that if we can all concentrate on that one line of work, or propagation,

we might call it, for the next few years, we will establish that relation between school and home which has so often been wished for, and appealed for so frequently from the platforms of the National Educational Association. We hope some day to bring together the home and school, which belong together. Miss Eggleston will speak of the parents' study classes from the standpoint of the schoolwoman in the general sense, not in the specific sense of kindergarten.

MISS ANNA K. EGGLESTON, State Department, Albany, N. Y.—"Would you recall everyone to his highest duties, begin with the mothers; you will be astonished at the change you will effect," says Rousseau.

There is no greater problem in the educational world today than this one—how best to effect such a union between parents and teachers as shall result in the intelligent, sympathetic, and harmonious management of children at home and in school.

To kindergartners is due the honor of having taken the first step in this direction, and is it not true that the closer their methods are studied the more convincing are the proofs that the path which they have opened is the correct one. They have not been perplexed about scientific products, but have cautiously gleaned the simple truths that were easily comprehended from everyday experience. In the kindergarten there has been less talk of the "pedagogical phantom, the child," and more about Harriet, James, and Lucy. Here we find the workers whom Professor O'Shea so aptly classifies as the "ones who are responsible for making things go, and are concerned with facts only in so far as they can use them to some definite, immediately useful end."

Professor O'Shea's attitude toward the work of the scientific fact-gatherers, and that of the practical people, must help to clear away a good deal of fog for many students of child study and at the same time give cheer to a multitude of trainers of children who will be better able to see the true value of their work. While scientific problems are being discussed children are growing, and if teachers and parents are to have as their chief motive the gathering of valuable facts for science, there will doubtless be added to the old story many illustrations of the little foundling who died upon the street while two philanthropic persons stood over him trying to decide which of several institutions was best fitted to rear this little being from babyhood to manhood.

We have but to look back upon the beautiful mothers who in their simple ways have with great wisdom reared their children, but who had not the ability to state the first elements of the so-called science, to prove that the most powerful parental influence is not dependent upon the parents' knowledge of scientific facts. Yet who shall say that the "spontaneous action" which Professor O'Shea commends is not a scientific basis.

It is certainly true that too much detail of outlines and classification is apt to render a parent insensible to the greatest need of the present moment, and possibly at the time when his statistics have given him a theory for action the child may have outgrown the condition upon which the theory is founded.

With parents and teachers there is danger of an enthusiasm for proving old theories and establishing new ones that will make this work too intellectual and not sympathetic enough. One may solve mathematical problems for the delights of intellectual exercise, but the student of human life must have a deeper interest than intellectual recreation if he would effectually solve its problems.

There is the danger in this child-study work of thinking conclusions are reached when the evidence would be deemed very slight by thorough students.

Workers are here whose thumbs are pulling out what they deem to be educational plums, and, inflated with pride, the superficial investigator flings out his banner proclaiming the greatness of his achievements for the cause of science. It surely cannot be wise to enlist amateurs to bring lumber into the fields which the Preyers must clear away before they can get at the facts.

Professor O'Shea has truly said that fathers and mothers should know the large vital facts of child development, and these great vital facts are always simple enough to be comprehended by those who need to use them. Experience is the best guide to the knowledge of these facts, and a simple intelligent putting of these experiences by teachers and parents must lead to a comprehension of them.

In large city schools it is impossible for teachers to make personal visits to all homes, but may not the plan of the kindergarten of establishing mothers' meetings be introduced throughout the primary and secondary schools? For instance, one afternoon each month the teacher might send out invitations to mothers to meet in the schoolroom, and an hour be devoted to an informal talk by the teacher upon matters pertaining to school life, and parents be urged to give that information which would lead the teachers to know of the home life of her pupils. Plans for instructing and managing children might be explained, and parents invited to discuss them and bring to the teacher's aid anything from the child's standpoint. Statements made by children at home regarding school affairs would be invaluable to teachers, but too often they must work blindly because there is no co-operation with parents.

It is very evident that teachers must possess great tact and wisdom in order to lead these meetings in such a way as to bring out the great vital principles, and at the same time establish between themselves and each parent a bond of sympathy so that conferences regarding the welfare of individual children shall be as sacred and as tender as those ought to be which exist between the father and mother of a child.

After the discussion of the general or special topic the remainder of the time might be given to mothers who wish to have private conferences with the teacher. Why may not this be a practical feature of primary and secondary schools as it is of kindergartens? Year by year the work may become more specialized as the conditions permit.

It is a part of the plan and hope of the child study movement of New York that the flag which now waves over pupils and teachers of our state may yet float out, at least once each month from every union and district school, over parents and teachers assembled there to study child life and its needs.

It is not necessary to cite evidences of the way in which the best efforts of schools are thwarted through the ignorance and distrust of parents; it is also true that teachers often conceive false notions of affairs caused by misconceptions regarding parents' motives. One may well wonder how these little things escape with any original elements of life, save possibly that of original sin, since they are so often held by the right hand at school and the wrong one at home, or *vice versa*, and pulled in opposite directions, but it usually happens that they slip out from the grasp of each and limp out into the world carrying the scars of early training.

There is a subtle sense in which one may learn to live with children; hear what they say when they do not speak, interpret their acts, their plays, and be a true companion to them. While every mother ought to live after this manner with her children only a very few know their children in this way. Conse-

quently many children live alone, and the mother loses her first hold upon this life which is a part of hers, and so near, yet into which she has no power to enter. Nothing is more pitiful than the fact that so many mothers live and die perfect strangers to the real inner life of their own children.

Kenneth Grahame, in the "Golden Age," when speaking of parents and guardians, whom he calls Olympians, from the child's point of view, says, "This strange anaemic order of beings was farther removed from us in fact than the kindly beasts who share our natural existence in the sun. This estrangement was fortified by the abiding sense of injustice arising from the refusal of the Olympians ever to defend, retract, or admit themselves in the wrong, or to accept similar concessions on our part. For instance, when I flung the cat out of the upper-story window, though I did it from no ill-feeling, and did not hurt the cat, I was ready after a moment's reflection to own I was wrong, as a gentleman should, but was the matter allowed to end there? I trow not."

Though, as Professor O'Shea has said, "the majority of us are not needed to rear a science of child study," yet it is the majority that must do the important part for which the science is being reared. Teachers must be leaders in this movement among parents, and oftentimes must give arbitrarily, though kindly, simple directions for those who have neither the time nor the ability to solve these problems for themselves. The strong emotional nature of many a mother blinds her to the true condition of her child. She cannot believe that her boy is not truthful, and if he does wrong she is sure he was led astray by others. Oftentimes, as teachers, we grow impatient at this seemingly false pride. The wisdom of breaking down a faith which has often been powerful in keeping the tempted in the right path is to be seriously questioned. Men have said, I never could lie to my mother because she always trusted me. Faith in the good intentions of others is a powerful element in establishing acts of goodness. There is very little that is truly noble left when one does not try to rise to the belief of goodness which another has in him.

In these gatherings of parents for the study of their own children there must ever arise the question, What are the needs of the children who are not represented here by parents, what can we do for them? For it is not wise to permit the weeds to grow just outside the home garden. The day may come when the weeds shall strangle the cultivated flowers, and, besides, the study of one's own children awakens a love less selfish which has power to reach out to those of other households. And so, after all, it is the little child that is leading, and the stately array following are the parent, teacher, minister, biologist, psychologist, and economist.

THE CHILDREN OF OUR CITIES.

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[STENOGRAPHIC REPORT]

Sam Jones, that unique preacher who is very often slangy, seems to us very irreverent, yet says some sweet things once in a while. He said one day in his drawling manner, "I don't know anything about theology or botany, but I do love God and flowers." And so when I come to talk about the children of the great cities I have to confess that I know very little about pedagogy, I know nothing about civics, but I do love my city and I do love children. I believe perhaps that every kindergartner who stays in the kindergarten business can say those two things. Those who have been in the parts of our cities, crowded, dense perhaps, as some of them are; those who have known the little foreigners in our cities; those who have known the poverty that we so often hear people tell about say to us, "Well, in the days of Lincoln and Garfield, you know, poverty created character." It is not the poverty that made Garfield and Lincoln. They had the poverty of the country with the flowers and the growing things and the stars and the birds; they had the poverty that was healthful poverty. The children we know do not have that kind of poverty. It is not the poverty that helps toward self-discipline and growth. It is the poverty that warps; it is the poverty that cramps; it is the poverty that starves the spirit of the child. We know that who have dealt and lived with those children. You know that Herodotus tells us that he is about to write the history of the Greeks and the deeds also of the barbarians, and the Greeks always were talking about everyone else who did not live in Greece as barbarians. That spirit is not dead; it is among Americans today. You cannot talk to American people who do not live near the foreign populations without finding that spirit. A cultivated lady wrote to me the other day, "I am so glad to help you, but I want you to know that I care nothing for the foreigners. I want to help our own people." Who are our own people? Who are they? Who was your grandfather and my grandfather. I think they were foreigners. I am glad somebody put up with them. I am glad somebody endured them. I am glad somebody allowed them to come into good society and get a chance in America. I am glad that they had schools. I am glad that they had those chances. I am living among foreigners. I know them. I believe in the possibilities that lie latent in these foreign children. A

very clever woman in Chicago said, speaking of the foreigners, "I think that in the ideals of a nation we find their highest characteristics." You will find if you study the question at all that the Bohemians are religious people, with a zeal for religion. Why, the other day a Roman Catholic Bohemian showed to a friend of mine a little picture of Joh Huss, that he loved simply because he was a Bohemian and because he had religious zeal. He made no distinction. The Poles have that instinctive patriotism that has never been satisfied. I cannot help but believe when I hear them sing their patriotic song which is so full of pathos and tragedy, I cannot help but feel, that we can get hold of the Polish children—if we can get that love of country planted here—of course we can; it is already planted here; and because they love to talk about Poland is no reason why they do not love our country. Already this last winter that has been shown. The Polish people started an educational movement; sent to the Old Country for two lecturers, and almost the first request they made of these Old Country lecturers was, "We want lectures on American history, particularly constitutional history." That is the Polish people who, I believe, if led by Americans who love America in the broadest sense, will transfer their love of country to our country. Then there are the Italians. A lady said to me the other day she would n't visit them for anything; she might think at any moment a knife would be drawn and thrust at her. I have lived among the Italians. I have never been stabbed. I have found there an affection, I have found there an appreciation and a love of beauty, that I have not found among American children. I have now before my mind a picture of a little Italian girl in my kindergarten that I once had at Hull House. The walls were hung with the best pictures. There was a little study, one of Millet's little studies of a father and a mother teaching the baby how to walk. I was telling a story to the kindergarten, and I think it did not have Miss Wiltse's spirit or something; anyway, this young Italian would not listen and after a while I heard, right in the midst of my story, a little Italian voice saying, "Papa say, 'Go baby!' Mamma say, 'Come, baby!'" We all turned and looked at little Marie. She was gazing at this picture, and there she had caught instinctively the spirit of the picture. I am sure Millet would be glad to know that a child entered into the heart of his picture. She did not stop at its technique.

So I believe that among these foreigners we have all this potentiality, this possibility for patriotism, this possibility for religion, this possibility for art, for music, for poetry. I was talking with a Bohemian woman who lives in Chicago, the third largest Bohemian city in the world. This woman said, "Do you know I used to go to school in

Bohemia? Do you know how our Bohemian children go knee-deep through the grass and the corn flowers and the poppies? Why, I used to start very early so I could pick all the flowers I wanted." Those same little Bohemian children in our city go to school without seeing trees or grasses or dandelions. Their playhouse almost all the time is the garbage box, the alley, the street. No playgrounds in our great city for the more than 200,000 children—far from the parks, far from the lake shore, far from the boulevards. In Chicago we have 100,000 children living in eight wards that have all these advantages—the parks, the boulevards, our beautiful lake, that wonderful and elaborate set of boulevards that our park commissioners are not content with, planning more, planning more, but we have heard of no plans yet for playgrounds, no plans for squares such as they have in Paris, such as they have in Berlin, such as they have in London. To be sure London has just wakened up to the fact that her children had no breathing places, had no playgrounds; and fortunately for London the good people of long ago were buried in the middle of the city, and around the church there is the old grave-yard and the blessed angels must look down with pleasure at the playgrounds that are made out of the old graveyards. I'm sure I do not know whether the kindergartners have the feeling of patriotism so strong that they would say, "Bury us in the middle of town, if in that way we can give some ground to the children."

Now, I do not want to be pessimistic. This morning I went in search of a neglected portion of Buffalo, because I do not believe that the test of civilization in Buffalo is Delaware avenue. I do not think that the test of culture is up here where we have such beautiful churches, music halls, and all those things—which, to be sure, belong to all the people, and yet are so often far from most of the people. So this morning I wanted to find out how civilized Buffalo was. I was very much pleased with it, and it seemed to me so broad and airy and beautiful and clean after dirty, blessed old Chicago—Chicago is dirty and it is bad; but we do love it. So I went to the settlements, the two settlements here. As I live in one in Chicago I thought I would like to see what the settlements were here. I found no slums anywhere near these settlements—not that I do not think they are well placed. I found them not near great tenement houses. I found cottage houses, little yards in front, little gardens in the rear, vines running up over the houses—I began to inquire and I could not find that there was one spot, where people said there were very disagreeable tenement houses, overcrowded, bad sanitary condition. I did not find the dirty streets or the dirty alleys here that we are used to. So I must conclude that whether you are very civilized or not, you are

very nearly very civilized, and much more so than is Chicago. But then Chicago is large. We have had a fire and we have had a World's Fair, so we have to wait a little while to do a great many things. So I say that the test of civilization in any city is not what you do for the few, for the 100,000 children, but what is doing for the 200,000. Chicago has 400,000 children—over that number—under fourteen years of age. One hundred thousand live under the most favorable conditions; 100,000, perhaps, are scattered about on the edges of the city; then in the center of the city are the 200,000. Now I know what it means to those people to get to a park. There are at least five children in every family, nearly always seven, eight, nine, ten, or more. It takes five cents for two children; it takes clean clothes; it takes time to get them ready; it takes a great deal of forethought; it takes a transferring from one car to another; it often costs two fares in our great cities. Now, is that fair? Is it fair that the 100,000 children should have the parks and the boulevards and the lake shore and the summer vacations? Some say to me: "Oh, but you have a great many excursions for children into the country; you have picnics for children; you have kindergartens and all that." Yes, so we do. But that is not enough. After all, only a handful of children, and those generally the strongest, that need it the least, get into the country on an excursion, or go out to the park. It is the weaker children we are to look after. Froebel says that the kindergarten—I do n't know that I get his exact words—is to prepare children for citizenship here and hereafter. These children that we are dealing with in the kindergarten, and in primary departments, are the future citizens. Now, what is the value of those children to our city, to our state? In the time of slavery a little black child was very precious to its master because it had a money value. I do not believe we are so materialistic that we wish to tack a money value onto our children before we see what it means to care for them, and yet if we could in some way make it tangible to the people who will not see beneath things; if we could make them see how valuable these little children, these little foreign children, are the little children that are being reared in poverty, that are being cramped. Think of a boy being cramped. Think of cramping an acorn in a flowerpot and expecting it to grow up into an oak and not burst something! I believe that every boy should have about two acres of land along with a whole lot of other boys. Yes, girls too! I do n't know why I always think of boys. Because they do trouble me more, I think. I sit at the window in our settlement and I look out at the playground where the boys play. They actually do not know how to play. They seem out of place. They have been sent to work too early; the work has been

irregular; the school has been very irregular; so much so that many of them cannot read and write.

Now, what has the kindergartner to do with all this? She can't vote; she can't be mayor! No, but she has a great deal to do. Let me tell you what one kindergartner did in Chicago. She does not vote; she has n't any special or great influence; she has no political influence at all; but she watched the children last summer and she saw how almost barbaric they got before the autumn without anything to help them through the summer, and she, with some others, said, "We must not let this go on. We must try to have some vacation work for the children next summer." So she sent to New York and to Boston for all the facts that she could get about vacation schools. She found that they had been carried on there; they had been successful; the children had come voluntarily to them; that the school board had loaned the schoolrooms, and that money had been given, and that thousands of children had come to the public schools in New York for a half day in the morning in the summer for manual work, for free work without text-books. So she went before a committee of the Civic Federation in Chicago. She told about this, very simply. She stated the needs which grew out of her own experience. She told the facts; and today we have one vacation school in Chicago which is going to be run this summer to prove the value of such a thing. Now why can't every kindergartner keep a watch over the needs of the community where her kindergarten is? She gets nearer the people, she gets nearer the pulse that the politicians are always trying their best to get their finger on, you know. A lady said to me the other day, "Why, you people in the settlement live nearer the vote than anybody else," as if that were something wonderful. She was the daughter-in-law of a great politician. So while you need not worry about living near to the vote, perhaps you can feel that you live near to the pulse of the people; you know their needs. Now don't keep still about them, but just be an awakening force in the community. Tell about them from time to time where you go. Go before your women's clubs, go before your civic societies, if need be; or, if you are not a speaker and do not like to do that, go to one individual and put the need, and say it with all your heart in it; and if it has grown out of your experience it will tell and something will be done in your city. Study the needs that you see about you. If there is a bad tenement house, know about it; if there is a bad sanitation, know about it; if there are narrow, dirty, cramped streets, know about them, and consider them all questions that you are involved in, problems that you must stir up the other half of the city to look after. Now I do believe that the kindergartner must be a meditator;

she must be an awakener of thought in the community, she must be an interpreter to the other half that do not know how the families of the free kindergarten communities live.

This is such a great big subject that I feel as if I had hardly touched it, and yet that is the one practical thought I want to leave with you. Try to get play-grounds for children if they have not got them; get vacation schools for the summer; get singing choruses for children; get all those things. I am so disappointed to think I cannot hear that talk by Mr. Damrosch on "Good Citizenship and Singing." I believe in it. I have seen it this last year, and I think we ought to try more and more to get the children to sing, even though we may not be able to train them as we would like to. Just let them sing; get everybody to sing. I think if they would sing more they would n't swear so much. I wish we could sit down and talk together about this subject. I do not believe in the meetings where you talk *at* people; I think we ought to talk *with* people, and we cannot in such a large meeting as this. But I hope you will take home with you this little message, which is nothing more than a suggestion, and let every kindergartner be larger than a kindergartner; let her try to make, as Froebel said, all mankind love all mankind so that Christ may be truly interpreted to the world.

DISCUSSION.

PROFESSOR EARL BARNES, Leland Stanford Jr. University.—In using the kindergarten to improve the condition of our children in cities there are three great difficulties that confront a thoughtful man and make him hesitate in his action—I do not say he will give up the problem—Heaven forbid! I simply say that in all the charity kindergartens I have visited these problems have risen up to confront me. It is worth something to state the difficulties of a problem clearly. I shall confine what I have to say to this task.

In the first place, there is the economic problem, which confronts all charities, of relieving the pressure on a part of the lower classes enabling them to labor for a still lower wage, thus crowding the part of the lower class that is not relieved by charity to a point where they cannot live. Two mothers, A and B, are working for a wage which will just keep them alive. The charity kindergarten relieves the mother A of a part of her burden and under the pressure of competition she can and will submit to a still lower wage. Then B must starve. I do not say we ought to do nothing. That would be absurd. I simply point to the fact that owing to the play of economic laws the ten dollars you invest in charity kindergartens may not help any struggling mother, but may crush out some mother whom you do not see, and may enable me to buy a shirt for 68 cents instead of 70 cents.

The second difficulty lies in the fact that the kindergarten was developed among a well-to-do people, and it is designed to fit healthy children living under

sane conditions. The neglected children of our cities are unhealthy children living under insane conditions. G. Stanley Hall found the Boston teachers giving their children reading lessons about cows and buttercups when the majority of them were ignorant concerning such objects. It is not sufficient then, to say that healthy children always like cows and buttercups, so they should have them. As well say that since healthy children like cold baths a child with the measles should have cold baths. The charity kindergartens must be modified and used as medicine.

In the third place the use of the kindergarten as a charity school has a bad reaction upon kindergarten work and theory at large. The infant school, as projected by Robert Owen at the beginning of this century, was based on sound and intelligent principles. Under the necessities that surround philanthropic work it became debased into the pernicious and often wicked infant school of the ordinary type today. The charity kindergarten seeks economy, lowers the wage; employs, in order to secure its support, teachers with the philanthropic spirit rather than teachers with intelligent minds and good training, and, used as a medicine, it changes its principles and its traditions and falls from its best estate. A silver spoon may be a good instrument to scrape an iron kettle with, but it is very hard on the spoon.

Do not misunderstand me. I believe the way to elevate our neglected classes is to educate and care for the little children, but I raise these questions: Ought not the state to take hold and raise the burden for all the lowest families in a city at once, if it ought to be done at all?

Ought we not to have a kindergarten developed along the lines of the needs of this particular work? And ought not its traditions to be kept free from the traditions of our best kindergarten work?

And, lastly, ought the kindergarten, or any other tool of civilization, to be used in a way to seriously destroy its best usefulness?

PSYCHOLOGY OF DESCRIPTIVE GESTURE.

BY PROFESSOR S. H. CLARK, THE UNIVERSITY OF CHICAGO.

Before we enter into the discussion of the particular phase of expression that I have the honor of presenting today, it is necessary that we come to an understanding as to the meaning of two terms. First, we are to remember that expression, unless otherwise explained, is to mean the manifestation of thought and emotion by voice and gesture. Second, that by gesture we are to understand the responses of the muscular system to thought and emotion. Let it suffice that this definition is tentative; that we have a general if inexact notion of the meaning of gesture, which is sufficient for our purpose, and, further, that such modification as may be necessary for the thorough comprehension of our theme will be brought forward in the course of the discussion.

The kindergarten aims to develop expression, and yet, as far as I know, little work is done in our kindergarten normal schools in the

science of expression. As a matter of fact there is very little attention paid to the science of expression in the regular normal school. The Committee of Ten virtually ignore it, and their report has given the subject a decided setback. Mind you, I am no advocate for the teaching of posing and dramatic action in the public schools, but we do want our children taught to read aloud. This is elocution, and the basis for its proper teaching lies in the knowledge of the science of expression. It is because our normal schools are virtually ignorant of the science of expression that they have been unable to formulate a pedagogy of reading aloud. As a result most of our reading in public schools has fallen into the hands of teachers who make little pretense to teach it, and we can't blame them; or worse, into the hands of uneducated elocutionists (?).

From this brief diversion we are led back to the main discussion by the thought that only in so far as we understand the expression can we understand the mind. This may be a truism, but truisms often need to be insisted upon. As I said a moment ago, the kindergarten's aim is to develop self-expression in the child, and in the child a large part of that expression is gestural. The teacher, then, must understand gesture language. Fortunately, much of this is so universal that the knowledge is possessed by most of us. We know what the toss of the head and the stamp of the foot mean. But there are many aspects of gesture language so complicated that they need special study, and to one of those it is my pleasure to draw your attention today. The failure to grasp the underlying basis of this aspect has led to a mass of affectation in elocution that is revolting to the cultured mind, and is fast leading us into the unnatural in the kindergarten world. Even more; the physical expression of the child has been warped, and often he has been reduced to a mere automaton. Now, if we can lay hold of the psychology of descriptive gesture, I am sure we shall be better prepared to understand the child, to remove this tendency to automatism, and to lead him to a more complete and adequate expression of his mental action.

Psychologists agree that, especially in the child, there is a tendency to realize thought in action, to make ideas live in the body, in other words, to act, to make gestures.

We need now to note that gesture comes in two ways: First, by impulse; second, by volition. If we are frightened, we instinctively put up our hands; if we are insulted we raise the torso and head. These are instinctive gestures. If, on the other hand, we wish to point out a particular spot, we will use the hand in a particular way, and this use we designate volitional gesture. In the first of these classes we are unconscious of the gesture, in the second only partially.

so; for while the facial expression and that of the body are left to take care of themselves, we are momentarily conscious of our hand, and deliberately choose to use it as an agent with which to reinforce the spoken word. We must remember that while the intention to use one part of the body has its effect upon the rest of the structure, of which effect we are often unconscious, yet, since the main element in the expression is the result of the will, we shall call that gesture volitional.

Another element requires explanation: That, while the child may will to do something with his hands, the details of the gesture are left to take care of themselves. He wills to point out a ship, but he does n't think how the arm shall be raised from the side, nor what finger shall serve as the index finger. He wills simply to point. Hence we note that, as a general thing, the volitional gesture contains an element of the instinctive.

We may now enter into the midst of things. Every observer in the realm of expression has noted the tendency to accompany description with gesture. The words "The horse rushed rapidly by," are very likely, under certain conditions, to be accompanied by a quick forward movement of the arm. That is a descriptive gesture. But the problem is, what are those certain conditions under which this gesture will manifest itself. Here is where the confusion arises. Who has not smiled at the recitation in which the speaker acted out every phrase? For instance, "The carpenter raised his hammer," (*raising the arm, fingers closed*) "and struck the nail three times" (*striking three times*). All of us feel the absurdity of these gestures, and yet there are hundreds of instances equally ridiculous which we pass by without noting. But why are they ridiculous? Because they are out of place, unnatural. They are made to order, and are, invariably, in the child, the result of imitation. A proof of their unnaturalness is found in the fact that they are never accompanied by a corresponding facial gesture and form of vocal expression. Expression is a unit, and we recognize that a gesture is mechanical when it is not justified, so to speak, by the expression of the rest of the body. The lack-lustre eye, the vacant face, the open mouth, are too often the indubitable signs that the descriptive gesturing of the child is a perfunctory task.

Let us now turn to a passage, the rendering of which may be accompanied by descriptive gesticulation with evident appropriateness. Suppose we are in the midst of a highly wrought description of a battle, and we come to the words, "Having exhausted his ammunition, the brave fellow grasped the barrel of the gun with both hands, and waving the butt over his head brought it down with crushing force upon the head of his adversary." Can you not feel the fingers close

around the imaginary gun? Do you not feel the impulse to raise the arms and to bring them down with energy? What is the difference between the two illustrations?

Let us note, first, that the hammer example contained no emotion; the soldier example was full of it. Second, and this is most important, that in the soldier illustration the gesture was suggestive only, not detailed. You perceive we did not hold the fingers as if they held a gun barrel, they were clenched. We did not wave the arms three or four times around and over the head, but simply brought them back over the head as if preparing to strike with the gun; and, finally, we did not stop the arms when the gun struck the imaginary foe, but we continued until we had reached the full extent of our blow.

This is, then, the difference. In the first case the gestures added nothing to the thought; they were largely mechanical; they simply repeated the story in other language. In the second example, the gestures were instinctive, growing not out of any desire to show how the thing was done, but out of our sympathy with the picture. I have termed this the gesture of sympathy. It does not grow out of any desire to imitate, but is a manifestation of a well-known psychological law by which in intense emotional description we become what we describe. The child does not imitate the lion or the elephant or the steam car; he is one or the other of these. His sympathy with the picture leads him to identify himself with it, and hence the term, the gesture of sympathy. In the case of the soldier we became the hero. As his hands clutched the gun, so did ours clench; as we saw his arms rise above his head, so did our arms rise, and so on to the end.

Let us remember, however, that just in so far as we identify ourselves with our character the mere details vanished. You must have noted this in your work. When a child becomes the elephant he drags himself slowly and cumbrously along on all fours, waving his head slowly from side to side. It is the weight and size with which he sympathizes. But when he becomes the knight's steed, rushing to battle, he rises and runs with all his might. It is speed and speed alone which he becomes.

Now for our conclusions. First: Emotion, and emotion only, justifies the acting of description. Second: Emotion tends to destroy detail.

Let me elaborate each of these and show a few applications of these principles, and I have done. As to the first: We are all aware that there are differences in children. Every child will not be moved in the same way nor in the same degree by a given picture. Hence where a gesture of description would be perfectly appropriate in A it would be entirely out of place in B. The lesson for us is that in the

games, if we would have the children act the description, we must stimulate the emotion. If we cannot do that it is far better to leave the gestures out. Do you not recall how certain little tots act out every detail of description for you? With their whole body alive with emotion, they say, "Oh, teacher, I saw a dog running so fast, and then he jumped on a chair, and he held out his paws," and so he runs on, acting out every scene. But another child sits down and tells his story quietly. You note very little action. The excitement is absent and consequently the gestures. Now, I would urge you to treat this latter case carefully. Avoid suggesting the action; stimulate the imagination, and if you can't get the gestures you want, leave the child alone, or you will make a machine out of him. Theoretically we all agree with this method, practically, I fear, we are sometimes negligent. We are anxious for results. We can't see the harm of suggesting this gesture or that. Psychology tells us that such suggestion dwarfs the power of self-expression.

There are instances, however, which form an exception to our rule. These are where the speaker is describing some intricate figure or some novel picture. Here, appreciating the difficulty his audience will have in getting the idea, the speaker accentuates his verbal description by such action as will make the picture clear. Many examples will occur to you, but let us bear in mind that unless the picture be intricate or novel, the acting of it is ludicrous. How ridiculous it is to see a person act out every phrase in uttering such a sentence as "The man raised his hand to his hat, then slowly lowered it, and put it in his right hand pocket." The child might act this out, but under conditions I shall mention later on.

Second: Emotion has a tendency to destroy detail. At first glance this position seems untenable. You say, why emotion makes him act everything. But upon examination you will find that while he may act each detail of the sentence, he does so because each phrase or clause lives for itself and is not seen in relation to the whole. But, nevertheless he does not act each detail of these to him important thoughts. Some one feature predominates and that is acted out in large, in bulk. In the dog example, the child ran on two legs, not four; he climbed on a chair as a child would, not as a dog. He was speed and climbing, nothing else. He paid no heed to his gestures; they were entirely impulsive. Had he attempted to go into detail he would have been imitating, not impersonating, and just to the extent that his gestures had been realistic he would have failed to develop self-expression. An illustration will make this clear. If, in the story of the soldier, the words had been "He waved his gun three times around his head, etc.," and we had waved our hands three times, we should

have been ridiculous. Remember, the acting of description is justified by the emotion. To wave our arms three times around our head requires an amount of thinking which is incompatible with the emotional state, producing the acting of description. Hence the contradiction which many of us have felt in listening to readers and to children who have been wrongly trained in the kindergarten. In order not to be misunderstood I will grant that a child might wave his arms three times, but if you are a judge of expression you will find that it is *threeness* rather than anything else that he expresses. The heroism or desperation of the soldier is gone. Much of the detail in kindergarten games is imitative, hence volitional at first, and later automatic. I don't deny that there is a place for imitation in the kindergarten, but its place is surely not in such work as we are describing. The imitative gesture of the child in many plays is not instinctive, but volitional. It is the outgrowth of adult knowledge, or lack of it. Teaching a child to make a gesture here or there is pernicious in the extreme, and such teaching in many cases is the result of ignorance of the principles I have been trying to expound.

Another cause of this faulty teaching lies in our failure to distinguish between pantomime and ordinary expression. In the former we must act everything; in the latter the action is only occasional. A gesture which would be appropriate in the former would be entirely out of place in the latter. Take the lines,

In my little garden bed,
Raked so nicely over,
First the tiny seed I sow,
Then with soft earth cover.

You all know the the conventional gestures given to accompany these lines. The hand so (illustrating), for the garden bed, this gesture for the rake over, etc. This is pantomime, not gesture. I would suggest, by the way, that pantomime might be used for far more than it is in our games, but much of it is entirely out of place when we use the spoken word. There never was a child who instinctively made the gesture I made when uttering that first line. There is not enough emotion, even in a child, to produce such action, and if you will notice his face, you will discover how perfunctory was his task. Mind you, I don't say you can't create conditions under which such a gesture will be used, but you will have to force this text to get your conditions.

Pantomime has much more of the volitional gesture in it than has ordinary expression, and this leads us to another phase of the subject already hinted at.

We do not clearly distinguish between the volitional and the emo-

tional gesture. In the following lines the gestures accompanying the words are largely volitional, imitative:

Here's the church,
And here's the steeple,
Open the doors,
And here are the people.

But these gestures are plainly different in origin from that in the first line of the other stanza. As a matter of fact, in the line "In my little garden bed" we have merely description, in the line "Here is the church," we have a finger drama. In the first example we state a fact, in the second we make the fingers act, although the action is purely conventional. In the lines:

First the tiny seed I sow,
Then with soft earth cover,

I can readily see that a child might act out the story. Novelty of the idea might impel him to do so. But I trust I have made clear that there is a decided difference between these two lines, the lines of the steeple story, and the first line of the garden rhyme. But many of us have failed to discern these distinctions in the thought, and have sought to get the pupil to make gestures without supplying the emotional impulse, or have given an impulse not justified by psychology and the text. We know that certain gestures are appropriate in one place, and conclude hastily that they are appropriate in all. Third, not every child is equally responsive. We all agree as to this. Hence the value of the criterion offered you today. Just in so far as a child is moved through the imagination, as he identifies himself with his description, as it were, will he use the gesture of sympathy. Further, one element of the description will move one child, another element another. Now by noting his gestures you will get into closer sympathy with your pupil's imagination and emotion. I might add here that a child is much more prone to gesture of sympathy than the adult. A child finds new experiences every day. Their novelty fires his imagination and, consequently, his emotions. As we grow older there is less stimulation in our surroundings, and hence less action. There might be much profit in the development of this suggestion, but time is too brief to permit it.

In conclusion let me say that I have had no intention of disparaging in a sweeping way, the work of all the kindergartners. There are many who may never have thought of this subject in the way here presented. There are others who may have discerned these truths vaguely. If I have helped the latter to bring some order out of chaos, and the former to a new light, I am deeply grateful for this opportunity of showing you the value of the science of expression.

My last word is this: If there is anything in what I have said, it should teach us that uniformity in the child games means automatism; that every piece of description will act in a different way upon every child, some using cold, mental gestures, others broad, emotional ones. And, finally, the acme of success is attained, as far as expression is concerned, when the whole circle is alive with an apparent chaos which is in reality an exposition of a profound, underlying unity.

THE ALLIES OF THE KINDERGARTEN.

MISS CAROLINE T. HAVEN, NEW YORK CITY.

Every new movement is conditioned by the age which gives it birth, and he who would establish a reform in education has set himself no mean task. The heights to which he aspires present even to him a dim outline, while to the rest of the world they are wholly veiled. The path to the summit has to be hewn from the flinty rock. Alone must the reformer climb through obstacles that appear insurmountable. His progress is slow, but here and there he gains a point of vantage from which he may view the desired goal, and gain strength for further endeavors—or, again, the mountain tops become obscure as he loses faith in his attempt and foregoes the realization of his earlier dreams.

History reveals to us something of this struggle in the life of every great teacher. Each one in turn essays to promote the cause of truth, to lift the world to a higher level, to make men nobler, truer, and purer, and each in turn fails to accomplish all he would. Each, too, shows us at times the effect of discouragements at every hand; the failure to make himself understood; the indifference or distrust manifested by those upon whom he had counted for support; the lack of sympathy in the efforts to further the interests of humanity.

Froebel, with his sensitive nature, was keenly alive to the conditions which hindered his progress, and in his letters we find at times the outpourings of a heart saddened by the thought that he stood practically alone in his self-imposed task.

"I find it bitterly hard," he says, "to gain the smallest step in advance;" and again, "I find half the men I know arrayed against me;" and once more, "One can scarcely believe the fact that men are so dull; that no one is ready to stretch out a willing hand to achieve and carry out this system."

At other times the reverse state of feeling is manifest, when, cheered by the confidence of friends, by the approval of those who

were led to investigate in order to more effectively criticise, and by the consciousness of success, the realization of his hopes seemed close at hand and failure impossible.

"All your doubts and fears will eventually disappear to your perfect satisfaction," he writes in the flood-time of his successful endeavors; and a little later, "Already upon this fair tree fruits rich in blessing are showing forth."

The followers of Froebel have had to meet similar conditions in the establishment of their work. Look back to the early days of the movement and recall the difficulties experienced in even gaining a hearing, much more in gaining support.

The history of the kindergarten in this country is yet to be written, but in the records of its beginning one figure must always prominently appear—that of Elizabeth Peabody. A nature somewhat akin to Froebel's own, with untiring zeal and determined purpose, she went up and down the land, seeking to win approval for an idea that had become to her her very life. Misjudged by those who could not understand the philosophy she presented; lacking the sympathy and support of those who could appreciate the thought; hampered at times by a following of mere pretenders who played upon her too credulous nature, she stood alone, with alternate hope and fear, while the kindergarten idea, with feeble strength, barely turned the scale on the side of life.

From the outset the chief allies of the kindergarten have been the children who came under its influence, for, whatever its shortcomings, its methods have always appealed to the child's instincts and needs. Through the children a recognition has been gained in the home, as the mothers have welcomed the means offered for a closer bond between themselves and their children. For a long time the support rested here; it was a case of live, let live; now and then it attracted some local attention, but till within the last decade it has been practically an unknown quantity in the problem of education which seemed unessential to its solving.

Today we are in the midst of a new revival of learning, and with educational interest and activity at every hand, the kindergarten has suddenly come into prominence, and finds itself allied to all the great factors of the new movement.

Teachers of all grades are asking us to help them to recognize the innate tendencies and impulses of children, and to develop these through the individual efforts of each. The advocates of systematic child-study find a fruitful field for observation in the children of the kindergarten, and ask for our co-operation.

The specialists of science, art, music, etc., look to the kindergar-

ten for the elements of their respective arts. Even the psychologist, so long engrossed in metaphysical discussions, thinks it not beneath him now to patiently study the little child, and through numberless observations to build up a new and rational system of psychology. The educational leaders everywhere recognize the kindergarten as an integral part of the school system, and the formerly unknown methods have now an acknowledged place.

The time of greatest success is often the time of greatest peril. How have we borne this sudden and phenomenal growth? As the sun of prosperity has shone steadily upon us, have we struck deeper root in order to gain new sources of power to enable us to withstand the unaccustomed fervor?

It cannot be expected that our new allies will see nothing to question in our methods and aims, but how have we met their just criticisms? Such crude, malicious statements as recently called down the condemnation of every fair-minded and earnest teacher need no consideration, but as kindergartners we should not wince when our methods are honestly challenged, and we should welcome every opportunity to probe ourselves and give a reason for the faith that is within us.

The questions lately sent out by Dr. Stanley Hall, known as the "Kindergarten Syllabus," is a case in point; though these questions in the main were prepared by kindergarteners. However much some of us may take issue as to the results to which many of these questions may lead, it is helpful to us all to have the search light turned full upon us, that we may better see our weaknesses and learn to know on what we really stand. The essentials will always remain and it were well to let the non-essentials go, though some of them we have fondled so long that we must be pardoned if we do not easily cast off our burden.

The real kindergarten can never die so long as we keep fast hold of the vital truths at the foundation, and pursue these in the spirit of him who saw "in every child the possibility of the perfect man."

That the kindergartner has failed to fully meet the occasion is undeniable; her general attitude from the first till now has not placed her in the line of progressive teachers. She has isolated her work and refused to view it as a part of the great whole of education. She has so idolized its founder that she has failed to see him in his proper setting in relation to other "master minds." Worthy as Froebel is of love and reverence, grateful as we must ever be for the possibilities of childhood he has pointed out to us, we have no right to look upon him as one so divinely inspired that his methods may not be improved to meet conditions of which he could form no conception.

The need of a closer connection between the kindergarten and the school is acknowledged "a consummation devoutly to be wished." From the kindergartner we continually hear that this union will fail of realization till the teacher—meaning the primary teacher—has had the advantage of a full kindergarten course. It is granted at the outset that a knowledge of Froebel's principles and their application is most desirable, nay more, a necessity, for every teacher, but is this enough?

The teacher has studied us to a greater or less extent, and so effectively in some instances as to create a doubt in the minds of many as to the need of special kindergarten training for the child; but this is not sufficient to bind together the two. It is the kindergartner who must help to bridge the gap by gaining a clear knowledge and keen insight of the work that follows hers and of their relation to each other.

Many a kindergartner objects to the term "teacher" when applied to herself, as if her work were something apart from all other educational forces, but till kindergartner and teacher can have a common purpose and spirit, the unity in education for which we vaguely yearn will never come to realization. This common purpose and spirit can only result from a real understanding of the work of each by the other, and to reach this end the kindergartner must become a teacher in the highest sense of the word.

It is impossible to generalize of so large a class as teachers, especially as conditions vary greatly, but each of us must at least know one at whose feet we may sit and learn with gain to ourselves, as well as to those to whom we minister.

At the close of an enthusiastic meeting of kindergartners during the past year we were all at the high-water mark of complacency because, notwithstanding a full acknowledgement of our duties and responsibilities, and of our shortcomings and failures as well, it seemed evident that we held the key to the many complex problems of the day—moral, social, and educational. My own enthusiasm received a sudden and chilling plunge to its normal condition on my way home, through a conversation with a primary teacher who had been present—a woman of rare culture and wide experience, whose knowledge and application of kindergarten principles had often called forth my admiration. She said in substance: "Why do you kindergartners assume so much? Do all sound, pedagogical principles and insight into the nature of the child emanate from you? I believe most heartily in the kindergarten. I owe much to it. I welcome every opportunity to learn more of its methods, and I try to carry its beautiful spirit into all my teaching. But it is not alone from them

that I gain help, and more than ever tonight have I felt that the kindergartners were holding themselves aloof from those who would gladly unite with them, and who in turn could contribute something to the common good of all." Recalling the addresses of the evening, it was plain that the opinion so forcibly expressed was not without foundation.

Specialists of every class are liable to the error of unduly magnifying the importance of their own particular work. Probably at this hour in the various departmental meetings extravagant claims are set forth by the enthusiasts of certain methods, which cannot be borne out when put to a practical test.

The remedy for such a condition lies in a broader survey of the whole educational field, and a juster consideration of the relationship of the parts. But it seemed possible that the kindergartner had been particularly unfortunate in her understanding of these relations, and I determined to learn if possible how widespread was the opinion which had lately been expressed. By personal inquiries and letters I gained some facts relating to the *status* of the kindergartner. The number is limited and no general conclusion can be drawn in fairness, though they seem suggestive and may become helpful to us all. The list includes the statements of supervisors, superintendents, teachers of different grades, and mothers, each one being an acknowledged advocate of the kindergarten, and having opportunities for direct and careful observation.

The questions referred to existing conditions of kindergartners, both public and private, in different sections of the country, in regard to scholarship, general culture, understanding of children, and broad views of education. Some extracts from the replies are here given:

"In general I find painstaking study of Froebel's principles, methods, and plans to the exclusion of what has been done by others."

"The examination papers of the kindergarten candidates fall far below the average of the candidates for primary schools who take the same general examination."

"The kindergartners generally appear well satisfied in regard to their intellectual ability—chiefly owing to the fact, I suppose, that so many young girls take up the study, who, knowing nothing else, feel content with what they have obtained from their special training."

"We have monthly meetings for the discussion of general educational questions along broad lines. No teachers are obliged to attend these, though the majority do so. The kindergartners, however, are seldom present, their excuse being that the subjects have nothing to do with the kindergarten."

"It has been absolutely necessary for us to lower our standard in order to admit enough kindergartners for the vacancies."

"I lately called a special meeting of the kindergartners of our city to consider some of the problems of their work, and took occasion to urge all to make themselves better acquainted with the vital questions of the day, for I feel that, as a class, they are inclined to take a narrow view of their work."

Such statements as these from earnest men and women of broad educational views indicate to us our sources of weakness and our need of individual and united effort in meeting the demands of the present day. They are presented in no antagonistic spirit, but because the situation calls for careful consideration by us all. We must look the matter squarely in the face if we are to continue in the vanguard of modern education; we must rid ourselves of many of our preconceived, often sentimental, notions that retard our progress; we must dig deep that our foundation may be secure.

In the April *Atlantic*, Mr. Atkinson points out that by common consent the teacher is found wanting in three particulars: lack of general culture; lack of scholarship; and lack of professional skill. May not our deficiencies be fairly classed under the same three heads? We all agree, no doubt, that the requirements for admission to our training schools have been wholly inadequate to the character of the work, both in general culture and scholarship, and, if to this meagre outfit be added our uncertain training, the lack of professional skill is not surprising.

We have already taken a step forward along this line. The training schools are insisting upon a longer course of study and better qualified students, while public sentiment is slowly rousing to the need of broader culture in teachers of every grade.

The curriculum of the training schools is changing also; specialists in psychology, art, music, and science are recognized as essentials in every course, and take proper rank with the specialist of kindergarten principles and methods, while general culture is provided for by a study of the masters of thought along all lines.

The results of this broader study may not appear at once, but already formalism is giving place to the real study of the individual child and the one time magic power of the Froebel material to a rational view of its limitations.

In certain essentials we are not wholly found wanting. Our sympathy with children is unquestioned; our power of insight into their needs is conceded; and our unbounded enthusiasm for our work is acknowledged by all.

To these important qualifications we need to add: a clearer under-

standing of the general principles of education; the recognition of the true relation of the kindergarten to all other departments; a more intelligent appreciation of Froebel's thought and of its application to the child; a broader, sweeter, and more catholic spirit toward all our allies.

The full possibilities of the kindergarten may be still beyond our sight, but, if we will, we may do something toward its fuller interpretation, rising "on stepping stones of our dead selves to higher things."

THE PROBLEM OF THE CITY KINDERGARTEN.

ELLISE BERTHA PAYNE, CHICAGO FROEBEL ASSOCIATION.

The kindergartner in a large city labors under many disadvantages peculiar to her environment—some small, some great; but the greatest stumbling-block that lies in her way is the impossibility of bringing her charges into genuine contact with any part of nature save human nature.

Froebel's gifts and occupations, necessary as they are, can never wholly take the place of natural things, nor can they even be used in the kindergarten as the sole agents employed in a first course from which the children are to be eventually graduated into nature-study. I accept the various gifts as most suitable vehicles for a child's crude expression of crude ideas, as a means by which feeble fingers may be employed in inventions. I accept them as forms furnishing perfect standards for training of eyes and judgment, and suggestive combinations in number and proportion. I believe that the type forms are good playthings for children in the early play stage.

I value the occupations, and believe that, modified, they have their place. But before, and above these tools, I believe in nature. From the dawn of consciousness, the children should be surrounded by nature. The country child throughout the year is immersed in beauties, in wonders inexpressible. The fancy is continually stirred by the sights and sounds of the outer world. The glory of the autumn, the miracle of the springtime—all the myriad forms of life awaken the poetic imagination. The understanding is stimulated to solve the problems that nature daily propounds to the questioning child. All this is in the line of natural education. The unconscious study of nature must precede, accompany, and supplement the use of gifts and occupations. For the world of nature and the world of man and his works furnish the stimulus to that desire to tell one's thoughts in form, for which these play materials are but the instruments.

Froebel's plan surely was to bring the children up in the heart of nature, to study her creatures, to become familiar with her moods, to love her beauty, to solve the riddles she propounds. Then his handicraft was meant to meet present needs and pave the way, not only for industrial work, but for the expression in art forms of his joy in nature's loveliness. Every other function of the gift and occupation, such as training to neatness and industry, fades before the two large purposes which they serve. First, they are an outlet for the child's creative energy, which must embody the forms that have appealed to his interest by their use and beauty; and, second, they serve as a means by which a little child may produce and give.

Love must have an outlet. Expression deepens love. When nature has aroused love for creature, and given a glimpse into the wonders of her laws, a foundation for religious feeling has been laid. The order, simplicity, and purity of natural things are readily appreciated by the children long before they can voice the ideas awakened. Evil is driven from the mind when it is filled with interest in what is truly lovely. There is no surer way to develop in the character the spiritual attributes of sincerity and love of harmony than by surrounding the children with nature, and allowing them to feel the values you set on these things. Loving the flower means love of the color, the purity, and sweetness. Love of the tree is really love of its strength, its generosity of branches, the protection it gives to boy and bird. So every natural thing familiarly loved is building in the child heart the love of the spiritual qualities of which it is a suggestion.

Who has not, pondering child-wise on the illimitable depths and heights of the blue, gained hints of the idea of infinite space, or personified the watchful stars as brooding eyes? The symbolism of nature needs not a hint of interpretation to a little child; and I believe that the lack of spirituality, so decried in modern life, may be traced to the impossibility of this natural child-communion with nature in the city and the failure to recognize and nurture it as an educational factor in the country.

For the little children we must have nature-study; but they do not so much need "Nature as she is taught," but "Nature as she speaks while we are silent."

"Why, Miss D—— there is personification everywhere in the woods," said one of the older boys from a Chicago school, while walking with his teacher through a country grove where the class was spending the day. "There is that nettle, some folks are just like that, and some are like thistles, and then some people are just like that great oak tree!" This is but an illustration of the way in which the

mind that reflects is continually led from the natural thing back to those qualities which give it distinction and make it reflect human attributes.

I brought forty kindergarten children from Hull House to the country a year ago in the springtime. With many of them curiosity was rampant concerning this "country" of which such wonderful tales had been told. I would give much to know just what ideas were in the minds of some of those children when the word "country" was used. One child said as he was turned loose in a great green field, "But, Miss Payne, when shall we see the country? Where is it?" I explained as well as I could, and he said disappointedly, "Oh, I thought it was something somewhere else to see!" Poor little mortal, what picture had he formed? Others said as they looked around, "Why, the country is just a great big park, isn't it?" and one, "How nice for Miss Payne to live at the park!" One reproved the rest sharply, as they sat in the meadow eating lunch, for "busting down the grass."

Never shall I forget Annunziata, daughter of Italy, who at the close of this very busy day lay on the grass beside the station as we waited for the train, gazing with measureless content up into the sky, her great brown eyes rolling toward me often, to tell the utter satisfaction that she could not speak in English, and showing she was not too far gone in *dolce far niente* to feel the need of human sympathy.

They had seen the farmer ploughing the ground and planting corn, had picked handfuls of buttercups, had found tiny green apples and cherries on trees, and had now a new classification by the addition of the genus apple to Christmas trees.

I brought the same children out when the corn was cut and in shocks. The dandelion and milkweed had turned feather balls, and the apples were ripe on the trees. I led them casually to the only oak tree that I knew bore acorns. Down they went on hands and knees gathering them up. "Peanuts! Cocomanuts!" they cried. The hawthorn apples were another source of excitement, and the ripened corn a marvel. They argued long and earnestly over the supposed malignity of a tiny green snake, and when he slid away, wondered where his feet could be. But when they came to the orchard, the climax was reached in climbing the apple trees. All the quiet interests of a week from a country child's life had been crowded into a short day. I found one tiny fellow (his own head like thistle-down) kneeling in a grass plat. He was guarding a tiny, round milkweed ball with both hands, and bending down he kissed it.

Ever since, Hinsdale has been the place to which these children have referred every lovely or interesting thing described to them. "I know!" I know!" they shout, "It's at Hinsdale!"

Simply directing the attention of these fortunate country children to what is worth seeing, with an occasional question on what is before them, is enough teaching in the early stages of nature study. The mind's inherent love and curiosity prompt the observation and reasoning, which means mental growth when the child is in its natural environment. And all this absorption may be exhibited in an overwhelming enthusiasm for the dandelions or the first snow fall, or the rushing brook, or it may be simply that the child is in a quiet state of brooding over this great life. Then we say, "He is doing nothing, or is dreaming," or perchance is "lazy," if he be older. I say "blessed be dreaming." It is at such times that thoughts grow as germs in the dark, and we know it not until some remark is made and we stupidly say, "Where did the child learn that?"

There is nothing more significant of the original power of the child than this contented dreaming. Its loss is one of the greatest deprivations to the city child, forever lost in the confusion of hurrying images; a constant succession of fleeting impressions made upon his mind without time for reflection. An object catches the attention, excites comment, and is gone; another and another, with no time for observation or relation to other images in the mind. This condition leads to a quick, excitable, and superficial habit of thought in these children. I have found the mass of children in crowded localities invariably much more fickle than those in quiet neighborhoods. In going into a new kindergarten that was being organized on Halsted street two years ago, I discovered that it was remarkably difficult to enlist an abiding interest in anything after the first impression of novelty had worn off. This fickleness I have found strongest among the Italians, and least among the Germans. It is the stamp of environment, and shows itself all through the public schools. We find it one of the most difficult elements to cope with in the children's clubs at Hull House. A boy enters as a member of a story-telling club. He attends two or three meetings and then wishes to change his membership to a gymnastic class. This tried for a while, he thinks he would enjoy a drill club better. It is merely the changeableness of childhood, intensified by the rushing, changing city life.

Nearly all of Froebel's games are based on phases of natural life. They are intended to furnish poetic or rhythmic expression of the child's ideas of that which he sees about him daily. Do we always follow the law "impression before expression" in presenting these plays in the city kindergartens? For those games that relate to home or civic life they have a basis in a store of impressions gained from actual experience. It is easy to present these in accord with the laws of mind development. The plays of blacksmith, carpenter, baker,

and others embody experiences common to all. But they are absolutely cut off from a whole range of experiences that are as common as rain and sunshine to the country child; and yet we bring to them a host of nature songs, nature games, and nature stories, when they are utterly deprived of those experiences which would render these intelligible.

We can bring a few flowers now and then into a city kindergarten. The children plant seeds and watch them grow; and vigilant is the kindergartner who saves her plants from frosts and energetic janitors, or her fish and tadpoles from the many dangers that threaten them in a public schoolroom. One enterprising kindergartner that I know, had turned the low roof of the engine house into a veritable roof-garden, with the help of her principal, and against the wishes of the janitor. But a thief in the night carried off the thirty large boxes of rich earth that had been carried there and planted with care. Often a neighbor's goat or cow is the sole type of the class of "pets" so dear to children who enjoy space and freedom; and yet think what must have been the ideal in the mind of Froebel when he invented the barnyard, pigeon, and bird games—the "gardener and the farmer." By the light of psychology we realize that it is impossible to make our nature games spontaneous expressions of the children's ideas, when their only means of acquiring these ideas is through our descriptions, inadequate pictures, and through the games themselves. The apperceiving ideas must come from direct contact with nature. A question, therefore, which demands our immediate consideration is: "How can this direct contact be secured for the little children of our cities?"

DEPARTMENT OF ELEMENTARY EDUCATION

SECRETARY'S MINUTES.

FIRST SESSION.

THURSDAY, JULY 9, 1896.

The department was called to order at 3 p. m., in the People's Church, by S. T. Dutton Superintendent of Schools, Brookline, Mass., President of the department, who gave the opening address.

An invitation was read from the Women Teachers' Association, asking all present to visit the Chapter House, the home of the Association.

The first paper was read by Miss Flora J. Cook, Chicago Normal School, Illinois, on "The Place of Nature Study in Primary Work."

The discussion of Miss Cook's paper was opened by Mr. J. H. Van Sickle, Superintendent of North Side Schools, Denver, Colo. He was followed by Dr. W. N. Barringer, of Newark, N. J. Mr. Charles B. Scott, Oswego Normal School, N. Y., closed the discussion.

The Committee on Nominations was announced by the chair as follows:

J. A. Shawan, Superintendent of Schools, Columbus, O.
Miss Flora J. Cook, Chicago Normal School, Chicago, Ill.
Miss Minnie S. Mott, Orange, N. Y.
F. Treudley, Superintendent of Schools, Youngstown O.
Miss Elizabeth Baumgartner, Springfield, Ill.

Dr. Frank M. McMurry, Dean of the School of Pedagogy, Buffalo, N. Y., read a paper on "Some Applications of Correlation in Grammar School Work."

The paper was discussed by the following: Clarence F. Carroll, Superintendent of Schools, Worcester, Mass.; Dr. Charles A. McMurry, University of Chicago, and Dr. W. A. Bell, Indianapolis, Ind. Dr. Frank M. McMurry closed the discussion.

The department then adjourned.

SECOND SESSION.—FRIDAY, JULY 10, 1896.

The department met at 3 p. m., pursuant to adjournment, with President Dutton in the chair.

The first paper of the day was read by Miss Annie E. Hill, Director of Penmanship, Springfield, Mass., on "Vertical Writing."

The discussion was led by Professor R. K. Row, Normal School, Kingston, Ontario, and Professor D. H. Farley, State Normal School, Trenton, N. J. Mr. Stebbins of Brooklyn, N. Y., Mr. Edwin W. Still of New York City, Mr. C. A. Bradner of Chicopee, Mass., and Col. F. W. Parker of the Chicago Normal School continued the discussion.

The Committee on Nominations reported the following for officers for the ensuing year:

President, Miss Sara C. Brooks, Superintendent Primary Instruction, St. Paul, Minn.

Vice-President, Mr. E. B. Cox, Xenia, O.

Secretary, Miss Ida C. Bender, Superintendent Primary Instruction, Buffalo, N. Y.

The Secretary was instructed to cast a unanimous ballot in favor of the nominees.

After thanking the local committee for their untiring efforts in behalf of the visiting teachers and for many courtesies extended, President Dutton introduced the next speaker, Col. Francis W. Parker, Chicago Normal School, who gave an address on "Art in Elementary Schools."

Discussion by Miss Stella Skinner, Superintendent of Drawing, New Haven, Conn.

The department adjourned *sine die*.

HENRIETTA B. AYRES, Secretary.

PAPERS AND DISCUSSIONS.

OPENING REMARKS.

BY S. T. DUTTON, PRESIDENT, BROOKLINE, MASS.

It is my pleasant duty to welcome here the elementary teachers and all others interested in the training of children. Let us throw aside all unnecessary reserve and become at once not only co-workers but friends. Let us extend to each other the right hand of fellowship, and let us make the sessions of this department so full of kindly feeling and mutual helpfulness that their influence may long remain with us as a pleasant and inspiring memory. I shall not detain you with a formal or extended address. The programme that is to follow will, I am sure, contain enough that is substantial and helpful to fill the entire afternoon. I only wish to remind you of a few things upon which we, who are engaged in elementary teaching, may congratulate ourselves.

First: I will mention the enlarged conception now current of what children are capable of doing, and the truth so widely recognized that mental nutrition is more important in education than mere drill; that the mind, as well as the body, needs plenty of good food in order that vigorous exercise may profitably be taken, and that selection and arrangement of the elements of nutrition constitute one of the most important functions of the teacher. The recognition of this truth has gradually broadened and enriched the life of our school. It has also blest the homes for parents, seeing the possibilities open to them in the way of a broader nurture, have surrounded their little ones with those objects of interest and culture that have ministered to their growth, and so the home and the school are able to work together to a common purpose. Nature, art, music, and literature, instead of being regarded as extra, or of doubtful worth, are now the very backbone of the curriculum of the modern elementary school. Through their united instrumentality the whole soul of the child responds with joy and interest. We have talked of a liberal education as of something that belonged to the few who possess a college diploma, but in this new era education is liberal, not only at the top, but also at the bottom, and all along through its successive stages. In all this, I say, we may justly rejoice.

Another ground for congratulation is the fact that physical health

is being recognized as of first account in the working out of all educational purposes. Light and airy schoolrooms are just as good for the teacher as for the pupil, and happy indeed are those teachers who have learned the pleasure and profit of participating in outdoor games and gymnastics with their children. Also, most auspicious is it for our American schools that many teachers have discovered the intellectual and moral healthfulness of outdoor lessons in geography and natural science. I am ready to predict that outdoor experiences, both for the purposes of physical well-being, as well as for instruction, are to play an increasingly important part in the education of young children. Fresh air and sunshine should, as far as possible, be mixed with all school exercises.

But I wish also to call your attention to another special cause for congratulation. In the manufacture of goods from raw materials great progress has been made during the past few years; in utilizing what are now known as "by-products;" elements which were once regarded as worthless are now so handled and treated as to be of great commercial value. In some instances the larger percentage of the profit comes from these hitherto discarded materials. Now, fellow teachers, have we not discovered that in the education of a child, certain elements once allowed to go to waste are of immense value if properly treated and refined? Are we not almost prepared to affirm that nothing that manifests itself as spontaneous activity is to be discarded as waste? Consider the element of play as an example of these by-products. How long has play been used as an almost priceless factor in education? It was not until Frederick Froebel discovered this new educational factor and expounded its intrinsic value that what had hitherto been a stream of wastefulness was made to fertilize large areas of educational endeavor. Thus our infant schools have been revolutionized. Once it was a sin to have fun in school; now it is a sin not to have it. Almost the same thing may be said of the constructive and creative tendencies in a child. How grandly this element, once wasted, is now being utilized in our schools through the manual arts? There is another by-product which the graded system, with its orderly arrangement and earnest striving for uniform results, has well-nigh overlooked. I refer to individuality. I cannot congratulate you upon the full working out of this discovery, but only upon the belief that it is being discovered. Go over in the child study section this afternoon and you will find that some of the first minds in the country have worked upon this very problem. It is the differential, which distinguishes one boy from another, that we need to conserve. I congratulate you that through the study of this child this heedless waste is to be stopped; this sweating process as applied to

immortal souls is to end. Education is to help the child to be what his maker wished him to be, and his individuality is to be respected at every point.

My friends, do not think the discoveries are all made yet. We thought we knew something about the atmosphere, but lo, argon, a hitherto unknown element, is just come to light! We supposed we had established a permanent distinction between things visible and things invisible, but the X rays have gradually upset this visible conception. I believe there are yet great discoveries to be made in education, and these will be in the domain of the child's nature and of the better adaptation of means to end. Finally, we may rejoice and be glad because of the increased interest taken by thoughtful people in education as the one great social force that can civilize and Christianize the world. In this country, particularly, we find faithful men and women patiently studying the problem of education, not only that they may deal wisely by their own children, but that they may bear a hand in the uplifting of humanity.

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THE PLACE OF NATURE STUDY IN PRIMARY WORK.

BY MISS FLORA J. COOK, CHICAGO NORMAL SCHOOL, ILL.

Nature and humanity, if we interpret aright the teaching of great educators, poets and sages, are the two sources from which has come the inspiration essential to the highest development and usefulness of mankind.

Comenius deduced his principles of education from nature. Locke preferred the influence of a virtuous humane man. Rousseau, seeing man perverted through his training, believed nature the only true guide. Pestalozzi again is enthusiastic for humanity. And so on down the ages to Wordsworth and Browning, until we are forced to believe that it must be in the nice balance of these necessities, natural and human, that we shall find the law of perfect growth.

If this be true science is not the basis of primary work, but is one of its most potent factors.

In the relations and responsibilities to both nature and humanity which come to him through the demands of his present environment, the activities of every child find scope for action. The teacher's sole duty is to use these opportunities to broaden the child's sympathies, refine his taste, to make it possible for him to form genuine habits in thought and expression. All his work, reading, writing, painting

and singing are but means to this end — conditions for his best possible growth today.

According to this plan the subjects selected for study in science, literature, and history, grow from the present needs of a particular class of children, and therefore the subjects are not necessarily connected in themselves, though it often happens that they naturally are so. The true correlation of subjects must reveal itself in the improved actions of these children. Any other idea of correlation seems to me to be unnatural and strained. A day or a month is not adequate to finish for life the study of any educative subject. One might think it were so, as he watches the children counting the needles, reading, writing, painting, modeling, singing and reciting poems about an isolated pine tree throughout an entire month. The pine tree may become again and again the center of interest to a child, but I think it can in no right sense be considered a basis of work.

It would be as absurd as to narrow the child's observation in science to the needs and pursuits of George Washington, Ulysses, or Robinson Crusoe.

I would not seem to underrate the value of the study of such characters as these, but it seems to me that in order that the child may find his place, his true relation to his surroundings, he must also directly study the forces which are shaping man and matter in his own immediate environment.

It must be in the spontaneous activities and interests of the children that we shall find the true guide in our work.

If for one summer a child were left perfectly free to choose between a room full of elaborate toys and a sand pile or a brook, between a store of most beautiful picture-books and a flower garden, or even if we arranged the choicest of artificial pleasures against a yard which afforded only such advantages as sunshine and a tree, can we doubt which would oftenest be chosen?

A child longs to create. He must create; and that material which resists him yet yields to his efforts, which is the best medium of expression for the greatest number of his fancies, is his most abiding joy.

Another vital question is, can a child feel a necessity or purpose for what he does, or must he blindly follow a beaten path — spell the same word, work the same sum — run the same race his teacher has run. It means something that every normal child is born asking "why?" — "how?" Could their questions possibly be a key to what they ought to know. Locke hints that he thought it might be so when he said, "Educators fix the fashion to what they have, not to what their pupils want or need." I believe that the instinctive interest and

questioning of children furnish the germ from which the courses of study should grow.

Whatsoever the environment may be, we notice that there are certain things which all children love, question about, and seem to feel a necessity for. These are friends, food, and shelter. All children seem to have a natural longing for grass, flowers, trees and animals. They delight in work, rhythm, stories and heroic actions. These vitally influence them, and in so far as they recognize and feel the relation of these things to each other and to themselves, do they become useful to the world.

It has been said: "Among all nations the direction impressed on education depends on the idea which they form of the perfect man." The ideal man among the Romans was a brave soldier; among the Athenians a man who united in himself the happy harmony of moral and physical perfection; among the Hebrews he was pious and virtuous. Are we willing that our ideal man should be judged by the natural outcome of the present educational system? Are we cultivating in our children a sensitive good taste in the broadest meaning of the term—a sense so delicate that nothing out of harmony will be suffered quietly to exist?

We have a right to believe that the sky is a standard of beauty in color, as is also the work of great artists who have been willing to sacrifice life for the expression of their divine instincts. If, in all lines—nature, literature, and mankind—we could lead our children to the sources which we have reason to believe are genuine, beautiful expressions of harmony and truth, and there try to answer natural questions, it would seem that we must have come to the door of an ideal course of study.

I shall take the liberty to make the rest of this paper a record of experiences in primary work, not that they are especially satisfactory, but, as results of gropings in the great laboratory of child-study, they may be considered in the practical discussion of the subject.

For illustration I have selected only the line of work relating to two of the necessities of life—water and food. I hope, however, to make it clear that the experiments used have not been made the *first cause of investigation*, but became necessary in answering the questions which nature asked the children. That I confine myself to the nature side of the work is due entirely to the subject assigned me.

In our climate we have four great pictures during the year. Each season brings its changes, and each change its natural questions to the children observing it. What is the significance of the eternal alteration we note in botany, zoölogy, meteorology—perpetual change in object with no destruction of the elements which compose it? The

children are given more or less natural conditions for observing plants, animals, soil and weather throughout the year, and many of their questions they are able to answer for themselves by the help of simple experiments. As Lake Michigan is so important a factor in our environment, we go in the fall to the lake shore. It is a typical picture—water, sky, plant life, animal life, sand, and stones. To some of the six-year-olds who paint what they see it may be only a picture which is impressed according to the intensity of their interests.

One of its most direct interests to the little children was that it was from this source that all the water came to them which they used for drinking, cooking, sprinkling, washing, bathing, or for steam power. Without suggestions from the teacher the first-grade children asked twenty questions concerning what they saw. The following are perhaps the most thoughtful and suggestive: "Who made the big hole for the lake? How can it stay so full when we use so much of it? What makes the water move? How can it carry the boats? How does the water get up into our pipes and come into our houses? Why does the water stay in the lake and not go down or run over the city? How can fish breathe? Where does all the sand come from? How do the stones get so round and smooth? Where do they get the pretty colors? What is the name of this red stone?"

Many of these questions the children were allowed to answer for themselves through closer observations or the help of simple experiments. They were never told that anything was too difficult for them to understand, and indeed nothing proved to be so. The one responsibility seemed to be to find the things most vital in their development.

With acid the children found that a certain class of stones were called limestones, and that shells and bone also contain lime; they learned that the pebbles which scratch glass were called quartz pebbles.

The stones gradually became their friends, claiming attention whenever they presented themselves. The children, having found how they would act under a few conditions, were never tired of testing them to find out their greater possibilities. A box in which to keep the stone collection was needed, and this they planned and constructed according to the necessities of the case.

They went also to a swamp which is within walking distance of the school. Here was another typical picture. Different soil, water, plants and animals. These the children unconsciously studied through the use of their water-color paints. The water here was black and seemed unfit for drinking, and a series of lessons grew out of the children's efforts to make it pure enough for this purpose.

The following is a reading lesson in this line of work:

WATER.

We use water every day.

We use it for drinking, cooking, sprinkling, washing, bathing, sailing, and for power.

In September we brought home some water from the lake.

We let it settle.

We found sand in the lake water.

We brought home some water from the swamp.

We let that settle, too.

We found loam in the swamp water.

We need pure water to drink, so we tried to purify the lake and swamp waters.

We boiled them. The water all boiled away. The sand and loam were left.

We tried again.

We caught the vapor from the water upon cold glass,—there was no sand in it. There was no loam in it.

The water was pure.

Later their grasp of the preceding work was tested in the following lesson which I put also in the form of a reading lesson:

We played we were out on the ocean.

We had no water to drink. We were very thirsty.

Some one said, "Let us get water from the ocean."

We did this, but the water was salt.

It made us more thirsty.

Carleton said, "Let us strain the water." We did this, but the water was still salt.

Donna said, "Let us boil the water." We did this, but the water was still salt.

Hans said, "Let us catch the vapor from the water upon a piece of glass." We did this—the water was fresh.

How do you think we got enough water to drink?

The children knew that part of the same rain fell upon the lake and swamp, yet the lake water was hard and curdled when they used soap in bathing their hands in it, while the swamp water was soft and made fine suds. Then came the question as to what made the lake water hard. When we poured soft water through lime it instantly became hard. This fact was sufficient. That the images gained at the lake shore were vivid, however crude and incomplete, was instantly proved by their eagerness to tell that the lime in the shells, limestones, and bones of fish might make the lake water hard.

In another series of lessons they discovered the sources, uses, and chief constituents of the foods eaten every day; also the necessity for the mastication of food, and the reason for the difference in their summer and winter diet.

In the spring they made a garden, twenty-five metres long and five metres wide, in which they planted and cared for the most common

vegetables. They also had a plot in which they were allowed to plant the seeds of their favorite flowers. Each class estimated and claimed its own portion of work, finding the number of rows, number of places in a row, and number of seeds needed for each child. Again their questions determined the line of study. They noticed that some of the seeds came up more quickly than others. Seeking the reason for this caused them to examine the covering of the seeds for the amount of stored up food and energy contained. Imagine their surprise when they saw a small handful of beans, which they had placed in water under the pressure of an iron cylinder and a fifty-pound weight, exert, in swelling, a force sufficient to raise the cylinder one-quarter of an inch from its first place. It added not a little to the interest that the strongest boy in the class using both hands, had been able to lift the weight only six inches from the floor. They had no detailed analysis of the seeds such as—"The bean has a skin. It has two cotyledons. It has a plumule. It has a radicle." But they discovered some of the general effects of heat and light in the growth of their plants.

Later observation developed the facts that certain weeds were stronger than cultivated plants; certain insects injure the plants; certain insects help them; some plants need greater care than others.

A careful examination of the soil became necessary in order to find out why we needed to make a garden; why the plants grow better in garden soil than in the surrounding land. They found that the garden soil contained sand and loam mixed together. And in answering the question, which soil was the best for seeds, or what each kind did for them, they found by experiment the relative capacity of each soil to absorb percolating water, and the power of each to retain it. Their field trips to the swamp and lake were again recalled, and in the end they themselves concluded that a mixed soil was best, since it must be neither a desert in dry weather, nor a swamp in wet weather.

An interesting feature was added to the picture by the older children when they discovered that the earthworm is constantly, steadily doing this most necessary work. The results of the children's experiences were used for blackboard and printed reading lessons. Each lesson had a distinct purpose. It bound the observations of all the children into one picture, and thus new relations came to each child.

The direct purpose of all reading, writing, number, spelling, form, modeling, and painting was to make some mental image clearer. The repeated observations of the same things made constant repetition of words necessary, and the expanding images demanded a continual increase in vocabulary.

The test of a year's work cannot be estimated in the facts or knowledge gained by the children, but in their habits of work, love,

sympathy, and desire to know more of everything around them. It is largely, too, I think, in the power which they gain to recognize the right of everything, flower or worm, to its place, work, and life in the universe.

The little children cannot, and we would not force them, too early, to understand God's great law of harmony in nature. But they can catch the spirit of it when they see the animals feeding upon the plants, the plants depending upon the soil, and all upon heat, water, light, and air for life. The older children enjoy reading the law in such a series of changes as the following:

They see the rain water coming from the clouds free from mineral matter and making its way through the ground into the tree. They find in the sap of the tree the salts and minerals of the earth. They examine the wood and discover that it takes from the sap just what it needs, but that most of the mineral substance obeys the power of the sun and passes with the sap on into the leaves. Their wonder and delight grow as observation teaches them that from this point the water returns to the clouds pure as when it came; while the leaves carry the mineral back to its home in the soil. And tracing further they learn the leaves moulder under the snow, until, when the heat of spring comes, they are prepared to give off the gas which would be poisonous in winter, just in time to breathe life into the opening buds.

Yet, however necessary it may seem to the teacher to push forward until the children have thus plainly before them the beautiful harmony in cause and effect, she need never fear to allow them to pause on the way. If they are going in the right direction they will gladly go on when they are stronger, or if they happen to stray from her path they may perhaps find a better, more direct route to the same goal. The child must not be forced beyond the limits of his healthful curiosity and interest, if his work is to be truly educative. We can be patient and follow him if we fully believe that no question which he may ask concerning nature can possibly be isolated, or, however young he may be, entirely beyond his comprehension. There will be some relations which he can understand and which will make this new image expand an old one. If trees, flowers, birds and sky have a language which the child can understand, he can never be utterly unhappy.

Wordsworth would have us believe from his own ideal childhood that nature should give every child his first idea of God, believing that so he must naturally grow to understand the great

"Law which moves to righteousness,
Which none at last can turn aside or stray,
The heart of it is Love, the end of it
Is peace and consummation sweet."

DISCUSSION.

[Reported by B. C. Gregory, Trenton, N. J.]

SUPERINTENDENT J. H. VAN SICKLE, North Side Schools, Denver, Colo.—My discussion of Miss Cook's paper will lack the spice of objection. I must heartily endorse her views on this subject. I have looked in vain for a chance to attack her position, but I find myself ready to say "Amen" to it all. I desire simply to call attention to a few of the many good points by way of emphasis. The paper recognizes the pre-eminence of the study of history, literature, and science over the formal studies. The latter are relegated to their proper place, that is, as means to an end. While the great importance of a science is emphasized, the writer is not an extremist, placing what is, for the time being, at least, her specialty, as a center, around which all things are to revolve. She says "Nature study is *one* of the most potent factors." I think we may safely say it is one of two—humanity being the one and nature the other—and I would, since we are talking only of primary work, mention nature first. It is first in appealing to the child.

It continues during the early years to hold this place where routine methods and formalism have not placed means above ends. We hear of nature study as an aid in teaching reading; as an aid in teaching language, arithmetic, etc. This form of expression assumes that nature study is something of no real importance in itself, but put in to lubricate the educational machinery; to sugarcoat the pill which is to save the patient. I do not believe in nature study simply as a means of teaching reading and language. Let us make use of the materials which it so bountifully furnishes, but let us use it because it is of value in itself, and recognize the fact that it is the ideal material for these purposes because its supremely interesting content is valuable in securing perfect growth.

The paper states that spontaneous interests of children are the guide to the course of study. This truth is coming to be recognized. Within a few years we have seen evidences of this recognition in published courses, yet thousands of teachers cling to the traditions which make arithmetic the great essential and the standard of gradation. Subjects which arouse the spontaneous interests in children are not less, but more, educative than those to which they have to be driven. When the reading and a little arithmetic, *very* little, grow out of observations of nature which have roused the child's activities, they are serving a good end and are served in turn; yet I should hesitate to say that all is to be done in connection with nature study. I yet believe in some good, old-fashioned memory drill in the formal studies, but only to give the child the more complete mastery of these tools of education. This paper is, however, plain on this point. The statement is made that "all reading, writing, number, spelling, form, modeling, and painting are to be used to make some mental picture clearer." The clear mental picture, then, is the chief aim; reading, number, etc., are means to this end, and their services are rewarded by the increased vocabulary and greater facility in expression.

Since the child is to live among men as a member of society, and to develop in contact with nature, he should learn not only to be in harmony with society, but to make the fullest use of his powers in adapting nature's products and forces to his needs, physical, mental, and moral. The more completely he is able to do this the more life has to offer him and the more nearly he has found his place.

The fourth topic on the paper touches one of the chief difficulties in the proper management of this subject in the schools. In the paper we find this sentence: "The only legitimate experiments are those which answer questions Nature has already asked the child."

Much of the so-called elementary science teaching is exceedingly faulty in that it disregards this important principle. The first stage in the history of the development of nature study, the idea of entertainment, the telling of curious and unusual facts, can be traced in the present methods of too many teachers.

There is far too much telling of facts by the teacher, far too little chance given to the pupil to form for himself habits of close observation, under wise guidance; thus the great purpose of the study, insight into nature is spoiled. This leads back to the preparation of the teacher, on which nearly everything depends.

The teacher who acquires the ability to manage this subject well becomes a better teacher along all lines, becomes accustomed to following nature's ways. No other subject has half the effect of this in improving the teaching force. No other subject brings about such sympathetic relations. Even the routine, mechanical teacher gradually ceases to be the cold critic and ruler of the group of children, and becomes the trusted co-worker and guide. Teacher and pupils now have a common interest as investigators. The pupils are individuals, each to be treated according to his needs. So, while I can subscribe to what is said of the test of a year's work so far as the children are concerned, I would add that the effect of this work upon the teacher is equally marked. It is educating both pupils and teacher. The pupil is learning how to live, the teacher how to teach.

SUPERINTENDENT WILLIAM N. BARRINGER of Newark, N. J.—We are deficient in our conception of what may be called the elementary purpose of science instruction in public schools. We emphasize too much the matter of information, and leave in the background the result to the child in the training of his power of observation. We feel encouraged if, as the result of our instructions, the child knows a great deal. We need to know the child mind better. The essential character of mind is activity, and the essential power of mind is intelligence. Our duty is to set the mind to work on proper objects and to provide proper methods by which the natural activity of the child mind may be developed. The mind is not a dumping ground into which facts may be cast indiscriminately; the mind is a bundle of activities, and it is our duty to set these activities at work. The mind can no more act without leaving behind it a residuum of knowledge, however, than water can flow up hill. The older I grow the less anxiety I have about the communication of knowledge. If I can get the child's attention, and give him proper subjects on which to employ his activities, in accordance with proper methods, the product of such activities in the matter of knowledge will be attained. The great difficulty with a large number of pupils, and a large number of teachers, is the lack of elementary concepts. The concepts of pupils are defective both in number and in quality. To enable him to gain these concepts for the future we must see that his mind works aright and that the concepts which he obtains are right concepts, at least right in view of the stage of his progress.

PROFESSOR CHARLES B. SCOTT, State Normal School, Oswego, N. Y.—I want to express my approval of Miss Cook's paper, both as to matter and form. The paper was unusually practical and suggestive. It was not confined to general principles and generalities, but, after a presentation of the most essential principles, applied these to school work showing exactly how these were applied in

everyday work. Miss Cook has told us just how she has made science or nature study a basis for much of the other work in the primary school.

I want to express also my agreement with the principles Miss Cook has enunciated. Two ideas which she has expressed cannot be too strongly emphasized, that is, first, that in nature study the child must be the center and every thing must be studied from the standpoint of the child, and second, that everything in nature must be studied in its relations, not as an isolated thing.

The writer of the paper has told us, in her account of a trip with the children to the lake shore, how she endeavored to follow the lead of the children, to note their questions, the points in which they were interested, and to work out from these. Many of us on such an excursion would plan out very carefully exactly what we wanted to do and wished the children to see, and would devote our energies to leading them to see what we saw and as we saw it. Too often, under such conditions the little folks would be almost prevented from studying those things which, from their point of view, might be much more important for them than many features which appealed to our mature minds.

It is much wiser to follow the lead of the children, the path which their interests point out. This need not mean an absence of plan or sequence or coherence. Starting where the children are, as indicated by their interests and questions, we can lead them, step by step, to where we are.

If we study the interests of the children we will find that our nature study with children will be, almost exclusively, a study of life and action, of living, working nature, not of mere form and structure. We will study the development of flower and bud, the unfolding of leaf, the work of each part, rather than the form. If after our nature work with the little folks they forget about the shape and attachment and arrangement of leaf and flower, it matters little. It matters much whether they learn to appreciate the plant as something with work to do, and remember something of the life and work of the plant and its parts.

Even more important is the cultivation of an appreciation for the beauties of nature. If the children keep some realization of the beauties of the world about them, the beauty of form and color, the higher beauty of function and co-operation and unity, the mere facts of structure may slip from memory with little loss.

I would like to emphasize the importance, the supreme importance with little folks, of awakening and strengthening a sympathy and love for nature. Above all else the child should learn to love the plant and animal, to cherish and care for them.

As Dr. Hall has said, this is the beginning of the child's religion. If he learns to appreciate the world of sense, which is his world; if he is brought into right sympathetic relations with this world, he can and should, through his love for nature, be led up toward the Author of nature.

SOME APPLICATIONS OF CORRELATION.

BY FRANK M. MCMURRY, DEAN OF SCHOOL OF PEDAGOGY,
BUFFALO, N. Y.

Numerous words have been used as apparent synonyms for correlation, as concentration, co-ordination, and unification. But notwithstanding this confusion of terms the central notion involved in each is the same, that of relationship; it is that of connection of ideas, or of chaining thoughts together until they exist only in the form of a series or a network.

During the past year the influence of Dr. White and others, has been exerted to persuade teachers that this problem was not one of vital importance. Dr. White wrote an exhaustive paper upon the subject, in which he threw almost no emphasis upon relationships, while he laid special stress upon the importance of isolation of studies. I do not believe that the paper is in sympathy with the progressive movement in teaching. Teachers are fast coming to realize that a close connection among thoughts is one of the great conditions under which instruction can be interesting and thorough enough to influence mental life and character, and instead of relegating relationships to the background they are likely more and more to regard them as co-equal in importance with clearness and accuracy of ideas; hence the means of establishing them becomes one of the few great problems of teaching. The value of a close connection among thoughts being granted, what are the means by which it may be secured? They are chiefly two: First, the curriculum must be so arranged that the several studies may be brought into a close relation with one another; second, the actual recitation must establish the relations that this careful planning has made possible.

Let us consider the former means first. So far as I am able to analyze the situation, two objections to any such careful arrangement of the curriculum have found great weight among teachers during the past year; one of them is due to the doctrine of co-ordination, the other is the assertion that there is a necessary sequence within each study. Dr. Harris is the leading exponent of the doctrine of co-ordination, claiming that the curriculum consists of five groups of studies that are co-equal in rank. Quite probably he is right in this assertion; the curriculum is fivefold in its nature, and the five parts are in a certain sense co-ordinate. Each group might possibly be likened to a segment of a circle, the five groups together making up the circle as

a whole, or covering the entire round of knowledge, so far as the public schools are concerned. But while this view may be correct, the chief implication that it has allowed seems to me unwarranted, namely, that these groups are not closely related to one another. The fact is that the common-school study of geography does not belong in any one of these groups, but is made up of parts of at least three of them. It is closely related to the group consisting of mathematics and physics, to the one including biology, and to that including history. I would grant that the parts of geography are not intimately connected; but if there exists that isolation between any two of these groups that is often asserted, what excuse is there for allowing such a study as geography at all? Much the same remarks may be made in regard to drawing. The fact is that all that Dr. Harris has accomplished in his doctrine of the five groups is to show that there are five fields of knowledge which are unlike in kind. But unlikeness in kind does not by any means signify an absence of close relationships, and that is the chief point. It is true that inorganic nature, as mathematics and physics, is quite different from organic nature, as biology; but instead of being only distantly related, they are vitally connected, for plant and animal life is directly dependent upon inorganic nature. For instance, the leaves of trees are directly influenced by their physical environment. Their petioles are of different lengths in order that they may be well exposed to the air and sunlight. Their upper surface is glazed because since it is struck directly by the rays of the sun, evaporation could easily be too great; this function is left more to the under side of the leaf. When evaporation may still be too great leaves sometimes stand on their edges, or in the tropical climates they protect themselves by their great thickness. It is true that in times past such relationships as these have been largely ignored, but we know now that they exist, and we ought to emphasize, not neglect them. Take another example: Dr. Harris puts literature into one group of studies, and history into another, and, although perhaps he has not so intended, he has, I think, encouraged the isolation of these two fields. But while they are very dissimilar, they are yet very closely connected. Will any practical teacher today oppose the selection of many biographies, poems, and orations for the work in literature which bear directly upon the men and events described in the history? Numerous other examples can be furnished proving an intimate relationship among these five groups; hence Dr. Harris' doctrine of co-ordination does not show any want of vital connections among the five fields of study, and should not have the effect of building a chasm between them, as it has to a considerable extent.

The second objection to an arrangement whereby the parts of the

curriculum may be closely connected is the supposed fact that there is a necessary sequence within each study, and this necessary order of topics would be destroyed if the arrangement of the subject-matter in any branch were partly determined by some other study. I confess my obtuseness in this matter. It is especially difficult for me to discover a necessary sequence in reading, literature, written language, geography, and nature study. Probably a somewhat strict order would be demanded if these studies were taught as sciences, but very few, if any teachers, will assert that any subject should be taught as a science in the common school. It is true that there is *often* a *desirable* sequence in these branches, but there is also very often one that is weak and even undesirable, and we are inclined to overlook that fact too much. I believe that it is tradition, rather than careful study, that causes us to assert so generally that there is a necessary order of topics within each branch. If that is true, the objection to correlation from this side largely falls away.

It should be remembered, too, that whenever there is a close sequence within a subject itself, the suggested close relationship of studies need not destroy it. A proper arrangement of the curriculum will aim chiefly to secure a close relationship between studies at points where a necessary sequence is lacking within the individual branch. Let us take an illustration: During the past year I have had a mixed fourth and fifth grade which was ready to study the geography of Europe. Since in history the story of Columbus had been treated in detail, it was deemed advisable that we begin with Spain in geography. The study of Granada later suggested the Alhambra for the art and for the manual training. Some parts of our Jewish temple, that is Moorish, were observed and sketched; the Alhambra was roughly modeled in wood, and the columns were molded in lead. The life of Columbus suggested certain poems in literature, and the subject-matter for written language was chosen from all these studies. The suggestions that the several studies thus received came as a blessing and not as a curse. The class had been studying the geography of the United States, and were ready to pass over to Europe, but had no adequate reason for selecting one part rather than another; in manual training they had done some whittling and made several nail boxes; they were ready for something more difficult, but were indifferent as to what it should be. They had been *reading* a book called "Coal and Coal Mining," and were glad to change over to a poem on Columbus and to Irving's description of the Alhambra. The value of correlation is here apparent; it allowed several studies to receive suggestions as to their subject-matter at points where they themselves lacked sequence. Is not that a help rather than a hindrance? And

does not this state of affairs in which sequence is lacking exist very often. Indeed it exists in several of the high-school studies as well as in those of the grammar school.

When it is remembered, too, that after a certain topic in one study is once well introduced through another study, the latter has no further control over it—when that is remembered, I say, the fear that the close connection of facts within a subject is endangered by correlation is still further removed. In the above case the history of Columbus introduced the class to Spain, and then the geography of Spain was pursued as a topic by itself; the same was true in regard to the art and the manual training, etc. But when, finally, the history left Columbus, and proceeded to other men and to other countries, the teacher felt no demand to keep pace with it by abandoning Spain. And though Spain and Granada were finished in Geography long before the building representing the Alhambra was completed, that fact furnished no pretext for leaving the manual training work unfinished. This means that there was no attempt made to relate all the recitations closely to one another each day; the relationship was attempted rather for the month, or the term, than for the day, and a topic within any study after having been once begun was continued so long as there was a close sequence of ideas within it. Thus the sequence within individual studies will not suffer by correlation; wherever there is a close connection of points it is retained; and where this is lacking the gap is at least partially filled by the establishment of a close connection with one or more other studies.

So much for two objections to correlation, namely, that following from the unrelatedness of the five co-ordinate groups, and that referring to the necessary sequence within each study.

But there is another serious obstacle to the establishment of a close relationship among studies, viz., the danger of mixing the branches taught. In considering this matter it is necessary to discuss the second means mentioned above for securing an inter-relation among studies, namely, the actual recitation itself. A careful arrangement of the curriculum whereby a topic in one study will of itself remind pupils of a topic in some other is a great help towards connected thought, but the actual instruction should also be an important factor in establishing relationships. How shall it do this? It was my lot recently to observe a twelve-minute recitation with six-year-old children. Some apple blossoms were first presented to them for observation. The statements made in regard to these were written on the board and then read. Then the children themselves attempted to write some of the words. They also made a drawing to represent the blossom, and before the twelve minutes were passed their teacher

presented to them a short poem on the apple blossom which was read and reviewed. Thus within these few minutes five branches — nature study, reading, writing, drawing and literature — were presented. That was an excellent example of what ought *not* to be done, for, in attempting to teach *everything*, nothing was really accomplished. The actual recitation should not attempt to establish relations by mixing subjects. Such instruction affords abundant occasion for insisting upon the isolation of studies; hence we hear that cry so frequently. But cannot the relation between all studies even those that are co-ordinate, be taught in the class room without such a mixture? That is one of the most important questions in the whole matter. Dr. White's answer is "No, it cannot be done." On page 53 of the "Second Herbartian Year Book" he says, "How can a teacher show pupils the relation of a known thing to an unknown thing? To see this relation, both things must be in the pupil's mind. Hence in the same lesson the facts to be related must be taught or reviewed. It seems clear that the teaching of the relations between co-ordinate studies makes the isolation of studies in class instruction impossible." This conclusion seems to me unwarranted; in reaching it Dr. White has depended upon abstract reasoning, and is evidently not acquainted with the plan by which the friends of correlation would see it realized. Let an example show some parts of that plan: A mixed fourth and fifth grade was mentioned above, as having studied the life of Columbus and as having proceeded from it to the Geography of Spain. Granting the propriety of this step, several important questions are in place, as follows:

1. Can the history be used to introduce the general topic, Spain, without any confusion of subjects?
2. As particular topics are later reached, like sheep raising on the plateau, Madrid, Gibraltar, etc., can past related experiences, either from history, reading, etc., or from the home life, likewise be used to introduce them without sacrificing the geographical aim?
3. When in the midst of recitation advanced work has been reached, can facts, like the barrenness of the great plateau of Spain, be explained through familiar ones drawn from various sources without again losing sight of the geographical aim and without confusing subjects?

With these questions in mind let us proceed to the actual teaching. The first recitation on Spain ran somewhat as follows: Let us talk about the country from which Columbus secured help for the discovery of America. Why do you suppose he sought help of Spain? Because it was a prosperous country; there were large, powerful cities there; it had many vessels, etc. What cities have you already

become acquainted with? Barcelona, Madrid, and Lisbon. What other places do you know? Salamanca, Palos, Malaga, and Gibraltar. Can you point them out on the map? What do you remember about each? etc. It may easily occupy a whole recitation to recall these facts, the answer to the last question especially occupying much time. Suppose the second recitation now begins: It being quickly seen that most of the cities mentioned are along the coast, the following aim may be stated: Let us see why most of the cities of Spain are along the coast. Then will follow a discussion of the harbor there, the fertility of the soil around the edge of Spain, etc., while the high plateau is largely barren, the rivers not being navigable, the rains not being able to reach it, there being few woods, little grass, and few people upon it. This is pure geography. And the former recitation was also primarily geography; while the experiences of Columbus were used to introduce the class to Spain, this review of historical facts was not undertaken for its own sake, but for the sake of establishing among the children a feeling of interest in Spain; there was no confusion of studies, for history played a subordinate rôle, and the recitation was controlled primarily by a geographical aim. Take another example: In spite of Dr. Harris' separation of literature from history, it is quite fitting after having finished the life of Columbus to study Tennyson's poem of "Columbus." Suppose it be thus introduced: Let us see how Tennyson describes the feelings of Columbus in prison. What thoughts do you think might be uppermost in our hero's mind? The answers would come, events of Barcelona, the argument of his case at Salamanca, his downfall caused by his enemies at court, his chains, what people would say of him in the future, etc. This again would be an incidental review of history which might occupy considerable time. But it is a review not undertaken for its own sake but as a direct preparation for a poem; hence it is controlled by a distinct literary aim and constitutes a part of the study called literature. When the study of the poem itself begins, it, too, is unmistakably literature and not history, and it will remain literature. This is a typical case; hence the answer to our first question is evident; namely, the materials in one study can be used to introduce a class to a general topic in another, establishing a close relation, but without any confusion of subjects. Now as to the second question: The children may have some related past experiences when the particular topic Madrid is reached. They may be able to describe to some extent the national game of bull fighting, or they may be acquainted with some of the Spanish paintings, especially those of Murillo, or they may have heard about the barrenness of the soil about the city and the rawness of the wind. This knowledge may come from general reading, or

from art study, or from past geography, etc. But whatever its source it can be used to introduce the new topic without danger of any confusion of studies. For several years there has been talk in this country about the five principal steps in instruction. It is the first of these steps that is involved here. Many teachers agree that in approaching any new topic it is necessary to occupy a period solely in the collection of the past experiences that bear closely upon it. If the curriculum has been so arranged that history is intimately related to the geography then the facts in history that bear upon a certain subject in geography would be collected, and also facts bearing upon the same subject from any other source, as literature, nature study, etc. After the past related experiences are collected, that form the foundation of the new knowledge, or get one into the proper mood for receiving it, the latter itself is presented and occupies the entire time. We conclude, therefore, that subject-matter that has already been taught in one study may be used as an instrument to introduce a general topic in another; also that each day's recitation may begin by recalling past related experiences from any source; that all this may be done without any necessity of mixing studies. This can be done in any subject without sacrificing the chief aim of that study. If time permitted, it would be possible to show not *only* that this *can* be done, but that, if it is *not done*, instruction is lamentably weak. Without the attempt to make use of ideas in one study that have already been taught in another, many of the most interesting relations are omitted, and thoroughness of instruction, even in the study that we are desiring to isolate, is made impossible. These facts should be borne in mind in all discussion of this problem.

Two questions have now been answered. They pertained to the use of familiar experiences at the opening of the recitation. The third pertains to the advance work; it asks whether or not, in the midst of the recitation, new facts can be explained by reference to familiar ones drawn from various sources, without losing sight of the aim of the particular study. The answer can be brief. Many excellent teachers throughout the country follow to a considerable degree the developing method of instruction. For instance, they would give to a class the one fact that a few miles from the coast Spain rises abruptly into a plateau, and that the whole of the interior of the country is a vast plateau a half mile high. The children must give the consequences. What effect would that have upon the rains? They would fall upon the edge of the plateau and not reach its interior. What effect would that have upon the lowland around the edge of Spain? Fertile. Upon the number of people living there? Great number, etc. What about the navigability of the rivers? They would have falls, since the

plateau rises so abruptly; hence not be navigable. What about the number and size of cities on the plateau—the presence of woods, birds, game, etc.? The teacher here would teach solely by putting questions. The children would learn solely by drawing conclusions from the facts learned in the past, coming from physics, physical geography, general reading, travel, history, etc. Here is an abundant application of the material from other studies. And yet is not this geography proper? Is not the geographical aim kept distinctly in mind throughout? Is there then any confusion of studies, although there is so much review of different ones? This again is a typical case, and the conclusion is reached that the mixing or confusing of studies can be avoided, even though the beginning of the recitation be occupied solely with recalling the past experiences that bear on the topic in hand, and the advance likewise employ abundantly subject-matter from many studies. Only one precaution needs to be greatly emphasized, namely, that whatever past experiences be reviewed, they be reviewed not for their own sake but for the sake of the work in hand; they must contribute to the accomplishment of the aim of the study concerned; they must be entirely subordinated to the branch that we are professing to teach at the time. Whatever is taught must be primarily either history or geography, or writing or reading, etc., but it cannot be two or three of these combined. Dr. Harris has lately thrown great stress upon the importance of isolating each study from all the others. We agree with him exactly upon this point interpreted in our sense. We agree that no good instruction can take place when the teacher is not quite sure whether she is teaching one subject or some other, because of the mixture. Even in the lowest primary grade both teacher and children should know whether they are learning primarily to read, in a given recitation, or to write. The two employments are very different in kind, and if the class is doing one of them well, it cannot give equal attention to the other or to several others. But, while it is extremely important that one subject be supreme during each recitation period, there is no objection whatever to allowing one or several studies to be used to introduce a large topic in another, or the topic for each day's recitation, or to form the basis for drawing conclusions on points that unquestionably constitute a part of that study which is under consideration.

I have thus far reached three conclusions, that the assertions in regard to co-ordinate groups of studies, and also in regard to a necessary sequence within each study, offer no serious obstacles to the establishment of a close relationship among subjects; thirdly, that the arrangement of the curriculum for this purpose does not necessitate any mixing of studies; and I have suggested that attempts to relate

studies in some such way as mentioned are not only possible, but highly desirable; that instruction which does not actually undertake these relationships is lamentably weak.

Finally, one thought deserves emphasis. All instruction culminates in the application of knowledge; the extent to which truths can be applied is the test of their worth. Future schemes for correlation will certainly take this fact more and more into consideration. The kindergarten presents to us the ideal in this respect. It has four lines of work, viz., the morning circle, aiming primarily to present rich thoughts, and the other three attempting to represent these same thoughts in new ways and to apply them to life. The common-school curriculum should establish some such relationship among its studies. At present we have too many studies offering new facts, and too few applying what have been offered. It is quite possible for us to follow the lead of the kindergarten more than we usually do. The drawing, written language, manual training, and general exercises, including the celebration of holidays, birthdays, etc., can all be regarded as lines of work which test and apply what has already been learned. Our curriculum is poorly planned until these studies are viewed more in this light, and until others, including perhaps the games of the school, are looked upon chiefly as means for applying knowledge gotten from various sources.

DISCUSSION.

SUPERINTENDENT CLARENCE F. CARROLL, Worcester, Mass.—The efforts in the direction of correlation or unity in our methods of instruction are explained by the prominence that has recently been given to a single principle of psychology, namely, association of ideas. In operation this principle may be stated in two ways:

(1) An intelligent man is one who is able, without effort, to supplement his knowledge of one subject by a large acquaintance with other kindred subjects. That is, no subject in his mind stands alone; his thinking constantly covers a wide range of information.

Stating the same thing in another way, from a physiological standpoint, we may say that the different sections of the brain have worked together so that when a given part is active other parts act almost automatically.

Whatever be the terms in which we express ourselves, we imply that the cultivation of the brain tracts or general information implies some fixed condition. A man, once intelligent, can never be anything else.

If we keep this principle in mind it is not difficult to explain education or development. Assuming the presence of discipline, whatever increases the range of information, whatever brings different forms of information into organic relation contributes to intelligence.

(2) Another underlying principle is found in the familiar statement that we must be interested in order to acquire knowledge. Interest is an important factor in the successful operation of the principle of association. Not only is interest based upon good philosophy and good physiology, but it is economical in the highest degree. Relying upon these fundamental propositions, we can explain the examples of unity in teaching that have come into view within the last few years.

(3) It is important that we inquire here what is meant by disciplinary studies. Some of the advocates of the old order still claim that a man may be well educated if he has been trained in a few subjects, and has attained a certain power in given directions. I must agree with those who claim, rather, that such a limited form of discipline does not necessarily make a man intelligent. The theory of association compels a curriculum as broad as our civilization, and training with the mere tools of learning, namely, the three R's, may be carried on without reference to the question of the general information of the learner.

In giving instances of unity as they come under the eye of the careful observer, we shall find ourselves dealing principally with what may be termed "culture" subjects. First, the most important center of association in teaching has been found to be language and reading. In the study of botany, geology, physics, chemistry, physiology, in fact, all forms of natural and physical science, we teach by experiment, and language instruction should here be at its best. Lessons in these subjects should always be talking lessons. The freedom and interest possible here are almost unequalled by any other work found in the public schools. Correct expression may be not less clearly and successfully taught in connection with literature, history, and social and political geography. The interchange of thought between the pupil and the teacher, when dealing with these subjects, is, or ought to be, a living force in the schoolroom. Again, we need hardly add that the reading book so familiar in the schoolroom of ten years ago has been almost entirely replaced by books dealing with these five subjects that I have named. The power of the silent revolution in this direction cannot be overstated.

(4) Drawing, as a means of expression or illustration, has come to be absolutely indispensable in connection with these same five subjects. Every picture or sketch, whether produced by an author or by a child, is evidence in point.

Working within the same group, an illustration of association is found in the combination that any intelligent teacher unconsciously makes between literature and history, between history and geography, and among the three at once.

(5) The study of botany, zoölogy, physiology, or physical geography cannot be intelligently carried on without a working knowledge of physics. Every movement of the vital current in plant or tree, in the human body or in the body of an animal, every inhalation of the breath, every variety of movement, every contour of the earth, every movement of wind or of water, the action of every force in nature is made intelligible only by understanding very simple laws of physics. An acquaintance with the operation of the chemical laws of reaction is not less necessary in the study of these same subjects.

(6) It is sometimes more difficult, but not less effective, to establish unity between two parts of the same subject. Considered by itself, there is no such thing, today, as the history of America. Our relations are with all parts of the earth. Our civilization is an organic part of a greater whole, and the true student of the history of the past keeps this fact in mind.

A good teacher of arithmetic teaches parts with wholes; fractions with whole numbers. Again, she combines percentage with common fractions, and combines

both common fractions and percentage with weights and measures. In fact, every problem has to do, or ought to have to do, with distance, time, and quantity.

Every schoolroom bears conclusive evidence of the progress in the direction of unity in our methods of instruction. Every exhibit of the work done in a school, or a system of schools, brings this idea to the front.

In this discussion I have used the terms correlation, association, and unity to suit my own preference. The philosophers can settle at their own convenience fine questions of distinction that have been thrust before us during the last two years. As teachers, we are interested in the business side of this question. With a few axioms upon which we can confidently rely, it is our duty and privilege to put theories that we have accepted into practice, ever holding ourselves ready to review both our method and our theory.

DR. CHARLES A. MCMURRY, The University of Chicago.—Referring to the discussion by Superintendent Carroll of Worcester, he admitted that correlation has nothing new to offer, but it has something tremendously old for American teachers to realize. He referred at some length to Mr. Carroll's illustration concerning Buffalo, and claimed that the things a teacher would not be found able to impart are just the things which we have a right to demand of the teacher. The work begins and ends with the teacher. The trouble is that the teacher does not recognize the value of relations, and in the illustration of Buffalo the whole point of the illustration is dependent on the relations of Buffalo to the environment referred to by the speaker. The teacher must recognize the value of these relations, and then the child will understand what he is taught. The teacher must know that Buffalo has the very relations which have been pointed out. Indeed, the seeing of relations is the most important work with which teachers and superintendents have to do in their work of teaching. He further said that teachers are required to reconcile two apparently contradictory ideas, those of isolation and correlation. Dr. Emerson E. White said that one excludes the other. It should be the purpose of the teacher to show that one does not exclude the other; but that they may be harmonized. To some extent each study must be isolated in order that a beginning may be made in the understanding of that subject; but afterward it must be taught in its relations with all other subjects in order that the understanding may be complete. The difficulty which the teacher experiences is in seeing the necessity of bringing these apparently opposing principles not only into reconciliation, but into such relations that their combination gives greater strength.

Dr. White has said that isolation is the fundamental principle of the course of study. Mr. McMurry endeavored to show the untenable character of this statement by comparing the school curriculum with the family. To some extent isolation here seems to be the principle. The father must attend to his daily work by himself, the child must go to school, and the mother must attend to the home duties; and yet isolation is not the fundamental principle of the family. The fundamental idea of the family is unity. In a similar manner there is a conception of a school course in which each study must be considered by itself but this is only a partial conception. The faculties of the mind must be associated, and there must be a linking together, a concentration of all the powers to the producing of a good result, and when this is accomplished the mind is working under the most favorable auspices.

There is a practical difficulty in the mixing of studies which is apparently involved by correlation. Many teachers make serious and numerous mistakes at this point. The reason is that they do not grasp the principle of correlation.

It is a great principle and cannot be handled thoughtlessly. The teacher must recognize that all topics are not of equal importance. It is absurd to suppose that they must be mixed up in a recitation on the assumption that they are of equal importance. In every recitation relations must be seen, and some controlling idea is necessary to give unity to the recitation, and in the grasping of this conception the whole method of instruction is involved. The true method of employing correlation cannot be settled in a moment; it is the product of careful thought.

DR. W. A. BELL, of Indianapolis, Ind., announced that he thoroughly agreed with what had been said on both sides. He, however, desired especially to enforce the last statement of the last speaker. There must be a certain thing to be sought in a recitation, a certain point to be reached. There must also be a knowledge of related matters which are to be brought into the recitation to reinforce the central purpose. The trouble is that people only get a general idea of this subject, and many teachers, instead of having a central idea and being willing to exclude what does not hold an important relation to that idea, try to make use of everything related to what they are teaching, and the result is a failure to leave clear impressions.

If the chaotic teaching of some teachers who have got this erroneous idea is to be the only alternative with the present method of teaching in which subjects are isolated, it would be better to go back to the isolated method. It requires on the part of the teacher a great deal of courage, in teaching geography and involving the historical relations of the topic taught, to use only what is necessary, and to resolutely cut out what is not. The danger to which this subject of correlation is exposed is dissipation. We must have associated ideas in the recitation, but these ideas are to be introduced only so far as they are necessary to the clear presentation of whatever the teacher has in mind to present.

DR. F. M. MCMURRY, in closing the discussion said: I think that comparatively little progress has been made during the past year in regard to the subject of correlation. But if the remarks of this afternoon are representative of opinions in general, there is much hope for the future. Four obstacles have stood in the way of co-ordination. First, the doctrine of co-ordination; second, that there is a necessary sequence within each study; third, the danger of artificial relationships among studies; and, fourth, the danger of mixing studies. We seem agreed that the doctrine of co-ordination does not necessarily stand opposed to correlation. We can grant that Dr. Harris is right in his assertion of five co-ordinate groups of studies, and at the same time believe heartily in close relationships among them. Second, as to the sequence within each study, Superintendent Carroll removes that difficulty by declaring that there is no necessary order of topics, even in arithmetic. We see, then, these two hindrances set aside. As to the third point, it is true that there is always danger of establishing superficial relationships among subjects. But that danger will be removed to a considerable extent if we endeavor to correlate, not by days and weeks, but by months and by terms. Fourth, the much dreaded mixing of studies can also be avoided if we take pains to introduce a topic by related experiences in other studies, and in advance work to subordinate entirely the thoughts from other studies to the aim of the particular study under consideration. The mixing of studies, in other words, can be largely avoided if we fix a definite aim in mind for each recitation and hold to it closely.

VERTICAL WRITING.

BY MISS ANNIE E. HILLS, DIRECTOR OF PENMANSHIP, SPRINGFIELD, MASS.

Probably no topic has provoked more frequent discussion or aroused greater diversity of opinion in educational circles than vertical writing. While some have denounced it as a passing fad, or a worthless innovation which ought never to be seriously considered as a rival of the orthodox, slanting hand, others have claimed superior advantages for it. Its friends have increased in numbers, and at the present time almost all the more progressive cities and towns in the country have made or are about to make, a trial of it. In many places where it has been introduced into a few schools the experiment has been so satisfactory that it has been adopted in all the schools.

Vertical writing is not new, as up to the middle of the sixteenth century nearly all handwriting was upright. In its earliest and crudest forms writing was vertical. Specimens of the Roman cursive hand of the fifth century show a decided slope.

In the year 600 the Greek uncial hand changed from the round to the oval style and many of the letters were compressed into a narrow shape. In the seventh century this hand began to slope to the right and continued in use through the eighth and ninth centuries. With these two exceptions old manuscripts all exhibit a vertical down stroke. In old cuts and pictures the position shown is erect and straight, the book or parchment being directly in front of the writer.

From the twelfth century to the time of the introduction of printing there were two well-defined and distinct styles of writing—the set book hand and the cursive. The set book hand filled the place now occupied by printed books, the writing being regular, the lines kept even by ruling, and pages provided with regular margins. The cursive hand, in which the letters were fundamentally the same as in the set book hand, was used for correspondence and business purposes. The set book hand disappeared when printing came, but the cursive necessarily remained. Up to this time the style of letters used in the cursive hand had been largely influenced by the set book hand, but later took on a more flowing style.

It is very interesting to know that handwriting, like every other art, has its different phases of growth, perfection and decay. A particular form of writing is gradually developed, then takes a finished or caligraphic style and becomes the hand of its period, then deteriorates, breaks up and disappears, being meanwhile superseded by

another style which is either developed from the old, or introduced independently, runs the same course, and in its turn is displaced by a younger rival. So in changing from slanting to vertical writing history is only repeating itself.

The slanting or Italian style of writing was invented by Aldus Manutius of Venice, early in 1500, and was dedicated to the Italian States. It spread to France and England when Queen Elizabeth changed her upright style to the sloping, and slanting writing then came into fashion in England. German writing succumbed to the new fashion at about the same time. As the art of flourishing was more readily developed with the sloping style, the simpler strokes of the vertical were abandoned by the writing masters in their preference for more artistic and complicated forms.

No serious attempt has ever been made to revive the discarded and forgotten vertical until about ten or fifteen years ago, when it was found that in Germany, France, and England, spinal curvature and short sight were becoming so general among school children, and were increasing to such an alarming extent, that special inquiry into the cause seemed imperative.

First, it was thought that the teachers were to blame, that they were careless about the positions of the pupils; but it was proven to the contrary, for bad positions were prevalent where the teachers were the most careful and painstaking.

A crusade was next made against desks and seats; the former were too sloping or otherwise, or were not adjustable, so they bought desks that were adjustable, with broader seats, but still the bad positions of the children remained. The question of light was next considered, but when that was remedied the positions of the children were not improved.

Attention was at last directed to the positions of the children while writing, and the unanimous opinion of the numerous experts engaged in the investigations was that slanting writing was the undoubted cause of the injurious postures of the pupils while writing. Some people say this is nonsense. I thought so until I began to study up the matter, and then I changed my mind.

Eminent surgeons in France and Germany say that shortsightedness is developed almost exclusively during school life, as is also scoliosis or lateral curvature of the spine, and statistical inquiries prove that it is not because these diseases occur at this particular period, but that the cause is due to the bad positions of the children while writing. It is also stated by an eminent surgeon (Eulenberg) that 90 per cent. of the curvatures of the spine which do not arise from some special disease is developed during school life, from the

ages of six to fourteen years. The International Congress of London and the Imperial and Royal Council of Hygiene of Vienna favored vertical handwriting on hygienic grounds. The school board of London recommended that upright writing be introduced in elementary and secondary schools, and generally taught, because it had clearly demonstrated to them by its adoption the injurious postures productive of spinal curvature and short sight are to a very great extent avoided. The French Academy of Medicine favored upright writing for the same reason. The Supreme Council of Hygiene of Austria decided that upright writing obviates one cause of spinal curvature. Doctors Berlin and Remboldt for the Wurtemberg government proved that the position that children were obliged to take in the sloping style causes the head and one shoulder to droop and the spine to curve. Dr. Javal, the Minister of Public Instruction in France, says: "Doubtless a pupil may hold himself badly even while writing the vertical hand, with the paper straight in front of him, but he can hold himself well, whereas, with the present way of teaching the slanting hand, it is a physiological impossibility."

It might be well to say here that, while vertical writing does improve the position of the pupils without so much care on the part of the teacher, it is often found that children sit very badly even when holding their papers in front of them; this is especially true where the discipline is lax.

Dr. Edward R. Shaw, dean of the New York University School of Pedagogy, says: "In visiting schools abroad, by actual count, the percentage that sat in a good position was not greater than the percentage in this country where the slanting writing is being used."

Dr. Paul Schubert, in a very interesting lecture delivered before the Society of Public Hygiene in Nuremberg, says: "The danger in the slanting writing lies in the fact that there seems to be no means of keeping the copy book in any fixed position; that there seems to be an almost irresistible tendency for turning and pushing the copy book till the body is twisted in a dangerous way." This position is not only bad for the spine but very injurious to the eyes. If you do not believe this, try an experiment. Take a book and hold it in this way and try to read for two or three minutes. The position of the pupil at the desk is governed largely by the position of the paper on the desk; as the paper is turned, the pupil is drawn around by it as the steel is drawn by the magnet.

Notice that in the best school in slanting writing the heads are slightly twisted. You may be surprised to find, if you have never tried the experiment, that when you ask the children to turn their books around in front of them, taking the position for vertical writing,

and ask them all to look down on their papers, every head which in the position for slanting writing was turned a little to one side, straightens as the paper or book is brought around. It is this turning of the head and twisting of the neck that is considered so injurious. The position required for slanting writing is not and cannot be hygienic.

Some teachers have attempted to teach slanting writing with the vertical position. In so doing, Dr. Javal says they are demanding something that is contrary to nature, because the weight of the body is thrown on the left side and the position they are obliged to assume is even more harmful than any of the others. When we began to use the vertical writing I really did not expect that the positions of the pupils would improve very much, but it is a fact that in the schools where we have introduced it the pupils sit much better than they ever did before, and far better than where the slanting hand is being used.

Dr. R. Leibrich, consulting ophthalmic surgeon to St. Thomas' Hospital, says: "But what now is the normal posture? The upper part of the body is to be kept straight, the vertebral column neither twisted to the right nor to the left; the shoulder blades both of the same height are, together with the upper arm, freely suspended on the ribs, and in no way supporting the body; both elbows on a level with each other and almost perpendicular under the shoulder joint without any support; only the hands and part of the forearms resting on the table; the weight of the head freely balanced on the vertebral column and not on any account bent forward, but only turned so much round its horizontal axis that the face is inclined sufficiently to prevent the angle at which the eye is fixed on the book from being too pointed."

Many of the advocates of vertical writing in this country have made such sweeping statements about it and have been so extravagant in their claims made for it that not a few have become prejudiced against it; for example, at a school superintendents' convention not long ago, one of the members in his enthusiasm over vertical writing said: "It is to be the handwriting of the future. Why, even now all business houses are demanding that their clerks shall write the vertical hand." A man in the audience arose, and in a very deliberate manner asked if he would name a few; he did n't care for a long list, but a few of the leading firms where vertical writing was actually required. The superintendent was unable to recall the names of any particular firm at that moment. We all know that a good, plain, legible hand is required in business, but we also know that in all probability no young man would lose a position because he did not write a perfectly vertical hand.

Scores of teachers have said to me, "Don't you like vertical writ-

ing? It's so natural! Children always write a vertical hand when they first enter school." Why, so many articles have been written to prove its naturalness that one would almost suppose that children were born with full-fledged handwritings of their own, and the great object of teachers, more especially of writing teachers, had been to break up this wonderful hand, and force upon them a handwriting that was neither suited to their present needs, or that would be of any value to them hereafter. These infant prodigies must have inhabited some other part of the globe; we never happened to have any of them in Springfield.

While it is true that there is a tendency among children to write more nearly upright than at an angle of 52° , because they naturally sit facing the desk, it is also true that they do not write at any uniform slant.

When children first enter school they write on as many different slants as there are children, and they continue to do so until they learn the relative position of the arm to the paper. I am very fully convinced that it is an easier hand for children to learn, but whether it is because it is more natural, or because children naturally write with a finger movement, I am not sure. A very good vertical hand may be written with a finger movement, and as small children write with their fingers, in spite of all training on muscular movements, the average work done by pupils in the vertical hand is far better than that done in the sloping style.

LEGIBILITY.

It is not necessary to say much about legibility because almost everyone admits that it is more legible, not simply because it is vertical (for a slanting hand straightened up is not very much more legible than the same hand slanted). The vertical hand is wider and is controlled by an entirely different movement, a pulling or rolling movement. Slanting writing requires a pushing movement; you are on the left-hand side of a word and you push through it. In vertical writing you are on the right-hand side of the word and pull through it. If you use the same movement on the vertical that you do on the slanting you make a failure of it. Vertical writing is not slanting writing straightened up.

While it is true that a number of vertical lines are more legible than the same number of slanting lines would be the same distance apart, the width of the letters, the broader turns and the space between them, help to make it legible, but letters should not be too wide, or you lose what speed there is in the hand.

Is it easier to teach? Yes, but do n't expect it to teach itself, nor

would I advise any one to follow a rule I saw given in an educational paper, not long ago, which ran as follows: "No special method need be employed in teaching vertical writing. The lessons may be given on the same old plan."

What is the same old plan? We know what the results are if we do not know what the "same old plan" is. We know it has resulted in poor writing enough without having any more of the same kind. The writer goes on to say—"The pen may be held in the prescribed way or in any easy position." A very nice, easy way to do, no doubt, but wrong, very wrong indeed. The author did not sign his name. I don't blame him, I'll venture to say the editor could n't have deciphered it if he had.

The same amount of effort put forth on the vertical that has been given to the slanting hand brings far better results, because it takes less time to learn it, and because the written papers can be so much more quickly looked over and corrected.

It is more satisfactory because the teachers can learn to write it quicker and better on the boards than they ever did the slanting hand, and the children can copy the work with less strain to their eyes. One very remarkable thing about it is that the teachers and children like it so much. I imagine the children like it because they can satisfy themselves better with it. Children like to do what they can do well, and the teachers like it because so many of the children can learn to write it well.

Many people ask, "Is there any speed in it? Can you write it with a free movement? I want nothing to do with a slow, drawn-out finger movement." A finger movement is not always a slow, drawn-out movement. A counting movement need never be a drawn-out movement, even when a finger movement is used.

Vertical writing can and should be written with a rapid and continuous movement, for a continuous movement is the secret of speed. Does the Empire Express, the fastest train in the world, stop and start over again at all the stations? Do you think the earth could make her annual trip around the sun in 365 days if she stopped occasionally for a holiday or took a summer vacation?

To me, one of the beauties of vertical writing is that it can be written with so many different movements. It can be written with the muscles of the forearm, it can be written with the whole arm, or with a combined movement; and another way in which it can be written quite rapidly is to rest the wrist and use a vibratory movement. Short hand writers often use this movement.

I have an announcement to make to ladies which I am very sure will interest them, and that is that a very fair vertical hand may be

written even if you hold your writing materials in your lap. While it may not be a very beautiful hand, written with these various movements, it is very rapid and perfectly legible, and is n't that what writing is for after all—to be read and not to be looked at as a work of art?

Some people say, "I do n't like the looks of vertical writing." Is not that because we are not accustomed to it? I am sure that the more one sees of it the better he likes it. Is n't it because we do not like to change, that we do not like to give up our old and cherished theories? Oh what a bundle of notions we are! We comfort ourselves by repeating the old adage, "You can't teach an old dog new tricks," forgetting that while it may be true of dogs, it ought never to be true of more intelligent beings. We can learn new things. We can accustom ourselves to new things if we will.

Thackeray said that to learn a new language or a new handwriting would almost make a man over again, and is n't it a good plan to be made all over again occasionally? To look at life from an entirely new standpoint; was n't that what Thackeray meant? I know it is almost an impossibility for a trained penman to make vertical writing look right; it goes against all his preconceived notions of good writing; he is sure the movement is wrong; how can you write, he asks, your hand is right in the way; he knows it's an utter impossibility to write it as rapidly, because he has to keep shifting his arm, and it stands to reason that if you have to keep stopping and starting over again you cannot write as rapidly, and yet, when he practices, he finds that his arm does in some unaccountable way move across the paper just as rapidly as when he was writing the slanting hand.

I can understand very readily why the business college man does n't always approve of vertical writing. His pupils are older, grown men and women. He looks at it from that standpoint, and not from the standpoint of the teacher.

I am not at all sensitive about telling you that I was very much opposed to vertical writing myself, but because I was opposed to it three years ago is no reason why I should be now, if during that time I have found that by actual experience in teaching it, and it is the only way to find it out, it is better for children. I was quite positive, all by myself, that vertical writing would not do all that was claimed for it, but I was perfectly willing to give it the best chance in the world. It was first tried as an experiment in a nine-room building. Last October it was introduced into the first three grades throughout the city. February 1st, into all of the fourth grades. Next fall it is to be introduced into all of the grammar grades.

In the two or three places where vertical writing has not given

satisfaction it has been, I think, because no books have been introduced; teachers have had no instruction and the system has not had a fair trial. In places where vertical writing is to be introduced the teachers should be instructed. It is not fair to the system or to the teachers to ask them to take up a line of work they know nothing about. If you can't have a supervisor all the time, have a competent teacher to instruct the teachers—some lessons on the board and on paper, with the best methods for teaching the children.

The wonder to me has always been, not that children do not write better, but that they write as well as they do with the poor teaching they have. When teachers are trained to teach writing as they are trained to teach geography, arithmetic, language and almost every other study, then, and not till then, shall we get good results. Poor writing in any hand comes from poor teaching and from allowing pupils to form careless, slovenly habits of writing when they are in school.

Every normal school should have the best teacher of penmanship that can be obtained, and every state should have some one appointed to look after the teaching of penmanship. Every city should have a supervisor of writing as much as a supervisor of music and drawing. Teachers of penmanship instead of opposing vertical writing ought to be thankful for all this controversy, for it has created an interest greater than ever before in the subject. Vertical writing is a protest against the bad positions of the children, and against the illegible scrawls of grown people, and I am in hopes that as a result of these discussions the pupils in our schools will go out into the world with straight backs—two good eyes, and a handwriting that he who runs may read.

If vertical writing will accomplish this, instead of its being a "fad" it will be one of the best and most lasting things we have in our educational system.

DISCUSSION.

PROFESSOR R. K. ROW, Training School, Kingston, Ontario.—From the point of view of a general educator, rather than that of the professional penman, there are two or three ideas regarding writing I should like to discuss, and my criticism of Miss Hill's paper, will, I think, be clearly implied in the statement of my own view.

It is essential that writing should be: (1) legible, (2) hygienic, (3) rapid.

The superior legibility of vertical as compared with sloping writing is generally admitted, but there are essentially different styles of vertical writing and corresponding degrees of legibility, and this is especially noticeable when speed also becomes a factor.

We can best approach the point of view I wish you to get by first considering position. There should be no question that the most hygienic sitting posture is with the trunk self-supporting. This position at a desk necessitates keeping the elbows close to the sides, because to raise the arms, spread them outward, and especially to carry them forward, as for sloping writing, is sure to be followed by a forward inclination of the head and shoulders, and a consequent compression of the vital organs. Leading French and German authorities have for some time been recommending this position, illustrated in Fig. 1, and it has begun to find favor in America.



FIG. 1.

Now, observe that when the elbow is kept close to the side, and the forearm raised the palm of the hand is turned inward, and if the pen is then taken the hand will be seen to rest somewhat upon its side. This position affords a high degree of hand control. It is the position naturally taken to put a fine point on a pencil, to thread a needle; it is the writing position of the reporter on the street, of the railway mail clerk, in fact of all who must write without a desk.

But it is obvious that with such a position of the hand and arm, freedom in sloping writing is impossible. Therefore if this position is the most hygienic, sloping writing is incompatible with the most healthful posture.

Now, let us approach the matter in another way. The approved position for sloping writing is, I think, with the palm of the hand downward, the elbows spread, and carried somewhat forward so that the fleshy part of the forearm will rest upon the desk. It has long been maintained that this is a natural writing position, and that it is absolutely essential to the sliding muscular movement, the pride of every thoroughly trained sloping writer. But it has just been pointed out, when the arms are raised and carried forward, there is an inevitable tendency to incline the head and shoulders. Hence, if my observations are right, the approved position for sloping writing naturally leads to a very unhygienic one.

In defense of this position it will be said that it gives a high degree of arm control, and produces the smoothest and most graceful letter forms, and so it does, for careful writing, and even admits of considerable rapidity, but, owing to the peculiar forward-and-back movement, as the speed increases the legibility rapidly declines. It may be very fast, but when it is so it is usually very bad. For speed it sacrifices a quality vastly more important.

Strange to say, this is the hand position nearly always shown and recommended for vertical writing, but this recommendation is, in a measure, consistent with the style of writing also commonly shown which retains essential characteristics of the sloping hand, Fig. 2.



FIG. 2.

This writing, you will observe, retains the oblique up stroke which has been the basis of an important movement drill, considered essential to sloping writing. Quite naturally this feature has been carried into vertical writing by simply changing the direction of the down stroke. Hence we have a hybrid style of writing, and what is worse, but a natural consequence, a hybrid movement, a forward oblique up stroke and a vertical down stroke, consequently a zigzag movement. It is the style adopted by the Germans, and by a large number of American publishers, and it is not surprising that in some quarters vertical writing is considered slow. When the hand must essentially change the kind and direction of its movement at the end of each short stroke, a rapid action, producing legible letter forms is impossible.

The foundation of true vertical writing is the broad ellipse, the whole of which, made in either direction, or either the upper or lower half, can be executed very easily, and hence with great speed. Fig. 3.

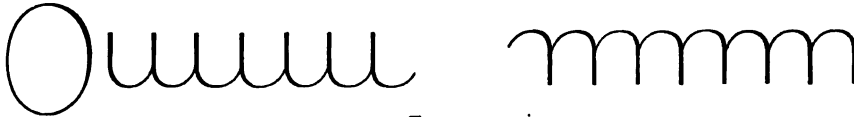


FIG. 3.

Nearly all the small letters are composed of this lower half of the ellipse, the under turn. Because there is so much of this easy movement in vertical writing, and because it takes time to change the direction of the movement, a few persons adopt it exclusively, producing the style shown in Fig. 4.



FIG. 4.

Such persons evidently place ease and speed before legibility, a principle the schools cannot recognize.

There is still another class of persons who appreciate the upper round turn in part, using it for initials, m's and n's, and in other places where quite convenient, but making these letters sharp where they follow letters made with the under movement. Fig. 5. Observe how much more legible this is than the style



FIG. 5.



FIG. 6.

shown in Fig. 4. But even this style no one would think of teaching. We must retain the upper round turn wherever it is needed for undoubted legibility. Fig. 6. If, then, this hand is the most legible, admits of the most hygienic postures, and a

simple, easy, natural movement, it must also be a rapid style, for speed depends upon movement. Our investigations have proved it to be so. The only obstacle to speed being the necessity of changing the direction of the circular movement. To further facilitate speed, writers of this style resort to at least three devices:

1. Using optional forms of such letters as *r* and *s*, one form being easy in one combination, and the other in a different sequence of letters.

2. Dispensing with the round upper turn wherever possible, consistent with legibility, as in the first part of *v*, *y* and *z*.

3. Sometimes lifting the pen where the direction of the movement must be changed. This device renders the next letter the same as an initial, for which the hand takes one direction as readily as the other.

It seems almost incredible that a disconnected hand can be written more rapidly than a continuous one, but such is the case with vertical writing, and the omission of the joinings adds to legibility.

Now, to sum up in writing, the character and direction of the letter-forms depend upon the movement, and the movement depends upon the position. The most natural and hygienic writing position is with the body self-supporting and the elbows close to the side. This position admits of an easy, circular movement for round, vertical writing but does not admit of free sloping writing, nor of the hybrid style, sloping up and vertical down. My plea is that, as teachers, we shall unite in an effort to rid our school writing of the hampering artificiality that has gathered about it, and that the children of this and future generations may have a chance to preserve sound bodies, and at the same time acquire a legible, hygienic, rapid, natural handwriting.

PROFESSOR D. H. FARLEY, State Normal School Trenton, N. J.—In the discussion of this subject I shall view it largely from the standpoint of the teacher, rather from that of the advocate.

All agree that writing is habit; that the style of form and position at the desk which develops the most healthful posture of the body, the easiest muscular control of the arm and hand, the greatest speed and legibility, give the best writing habit. All of these advantages are claimed by the advocates of the vertical style of writing.

In analyzing the subject we would divide it into two divisions: How to execute and what to execute. The first, we classify under three heads: position, penholding, and muscular control. Some would have us believe that how to execute is the only important thing to be considered and that what to execute will take care of itself. Others rush to the other extreme and say that how to execute will care for itself.

Looking at position from the hygienic standpoint, we find the discussion on this subject began in 1874 when Drs. Ellinger and Goss of Europe charged all the evils to the bad position of the book; at first, Dr. Ellinger demanded oblique writing on a book lying obliquely before the middle of the body, but in 1885 he professed a conviction that vertical writing in the straight, middle position was the only correct one. The first investigations by the medical authorities did not agree, but it was the beginning of other investigations by medical societies and educators in France, Austria, Germany, and England which has practically led to the same conclusion so far as the book and body are concerned, all agreeing upon the front middle position, the book being parallel to the front edge of the desk, the middle of the copy line being somewhat to the right of the breast-bone. All practically agree that the penholder should point in the general direction of the

forearm and that directing it over the shoulder requires an abnormal position of the hand.

The lateral control of the hand from left to right is one of the problems most difficult to solve; it is also the reason for shorter lines. When we study this control from the standpoint of anatomy, we find the muscles that are largely used in carrying the hand to the right are located outside of the upper part of the arm, and that the muscles that draw the arm backwards toward the body are located back of the shoulder running out and down to the spine. These muscles, as well as those located in the forearm controlling the fingers and thumb, are said to be too strong than those used in propelling the hand and fingers from the body. The muscles largely used in this movement are in front of the shoulder running toward the breast and collar-bones.

While we do not believe in the exclusive use of the muscles that control the fingers, we all know that it is absolutely necessary, in the low grades, to depend largely upon this movement in carrying on the number and language work of the schoolroom. But every teacher must remember that the lateral control of the hand must not be neglected. While the attainment of this lateral control on paper seems most difficult, it is without question much easier to acquire on the blackboard. The ball and socket joint of the shoulder seems to adjust itself better, and this is the most practical evidence we have that the ideal desk should be slanting; but an ideal is one thing, and a condition quite another. The question is how best to solve the problem of the present condition, which is a slightly slanting desk in the schoolroom and counting-house and flat tables at home.

It should not be expected that a person who has the slanting writing habit well formed can learn to write the vertical hand as well by placing the book squarely before him as by placing it in an oblique position. In fact, I believe the person who wishes to change his hand from slanting to vertical will make greater progress by holding his paper in the position he has been accustomed to, as the muscles will respond more readily to the mandates of the will. But for the beginner there is no question that the front middle position is the correct one from every consideration.

We will now endeavor to show some of the fundamental principles involved in the form, or what to execute. All agree that there are sixty-two forms to be absolutely learned, ten figures of the Arabic notation and fifty-two letters, as well as the many combinations of these letters in words. All agree that the learning of these forms and combinations through well directed repetition leads to skill, or habit in writing. But all do not agree upon the kind of form, and some do not give form any importance, while others give many kinds of the same letters (beginning anywhere and ending nowhere) leading to many habits through fear of destroying the child's individuality. We claim that every standard form of letter should be such as will lead to the fewest possible habits consistent with legibility, uniformity, ease, and speed. Every small letter should have one common beginning and ending (one habit) until the learner has sufficient muscular control to warrant him in abbreviating the standard forms. Each letter should be so constructed that it will conform to a smooth rolling motion, and that which is common to as many other letters as possible. Above all, avoid those forms which develop eccentric motions.

Why should we advocate a form of letter which requires the child to make a down stroke at an angle of 45 degrees to the right or to the left of the vertical, when the vertical is the main or common line? Why should we ask the child to form two habits when one is better than two? Why should we teach the child

to remove the pen from the paper in going from one letter to another in the unit word, when the pen or motion stops at every point or angle? Why not study it from the number of units of motion? To illustrate; write the combination "eve" and you will find there are two units of motion, if the "v" is joined to the "e" with a point or angle, as it should be in a low grade. In a higher grade we should teach the pupil to write the combination with one continuous motion by joining the "v" and the "e" with a loop. The capital letters should also be so constructed that they will have one common initial beginning, as far as possible consistent with concert drill.

We should recognize the fact that muscular control is a large factor in teaching writing, but we cannot ignore the pedagogical facts and necessities found in the forms of the letters.

All concede that vertical writing is more legible, that it is easier to teach and to learn, and that it avoids the possibility of flourish.

The speed and ease of executing vertical writing are disputed by many of our skilled penmen for reasons that are apparent. These penmen have worked faithfully in perfecting themselves in the writing and teaching of the slanting hand. They have the writing habit well formed. Self-preservation confronts them, and they are trying to save the ammunition of skill in flourishing which has taken them years to acquire, and which has been a source of satisfaction and profit to them.

While I believe slanting writing has something to do in causing poor eyesight, I truly believe that the prevailing method of teaching writing wholly from the board is ten to one more injurious. The unit of measurement on the board is two inches and on paper from one quarter to one-tenth of an inch. The children see the copy at different angles, it being impossible for all of them to see it from the same position. One moment the eye has an adjustment, or accommodation, as it is termed by the oculist, to see the copy on the board, and the next moment the eye must be adjusted to the paper, and this change is constantly going on until the copy is finished. If we wish to protect the children's eyesight and to make it possible for them to gain a correct conception of the copy, we must place the correct model the same distance from the eye as the copy they are required to make.

At no time in our history has the subject of writing agitated the minds of our leading educators and medical men as at present. Call it a fad or by any name you like. When men of the highest authority in medical science declare that "the question of instruction in writing should occupy the first place, as the teaching of this subject is attended with so great danger to spinal curvature, breathing, and digestive disturbances, myopia or short sight." When such vital matters as the relation of writing to hygiene and the application of true educational principles are involved is it not time to see that more attention is given to this subject by every teacher in our public schools?

Writing from an educational standpoint, develops a muscular control of the hand. It develops attention and close observation. It develops habits of order, judgment, accuracy, self-reliance and memory. It develops will power. It cultivates the taste. The hand is trained to obedience. The sense of touch and the sense of sight are educated and the will is strengthened.

Writing, drawing, manual training, and the industrial phases of the kindergarten may be classed under the same general head — the co-education of the mind and hand — all leading to practical, painstaking habits.

A paper on "Art Education" was read and discussed.

DISCUSSION.

MISS STELLA SKINNER, Supervisor of Drawing New Haven, Conn.—I find myself in something of a dilemma. I was asked to discuss a paper upon "Art Education," instead of which we have been given a dissertation upon psychology.

I am not a specialist in psychology, therefore will not attempt a discussion of a psychological question. But this is so important an occasion—the throwing open of one of the principal sections of the association to a consideration of the subject of art education—that I desire to improve it by asking your consideration of some vital points.

Psychological investigation is indeed important, it is well to understand about nerve centers, brain processes, and so forth. "Art may study the body long, but sooner or later it discovers the soul."

We owe to the scientists much, but to the artists infinitely more. They are the true prophets, seeing face to face what others see but through a glass darkly.

"The poets reach a deeper life
Than microscope or surgeon's knife.
Groping for facts, we lose the real;
Truth to be true must be ideal."

We have been told that "the child is dying for want of right food." I am here to say that the child is being fed as never before; that never has there been such devotion, such consecration to their work among teachers as now, and never have children been so well fed; by nature, by the best thoughts of the poets, by beautiful forms and pictures, and by right ideals.

Indeed, they are over-fed; much is still crammed down their throats which they have no taste for, nor need of; but things are better today than they were a year ago, and they will be infinitely better five years from now than they are today.

We have been told that "the child wants to do something." The child is doing something; he is busy with many helpful, delightful tasks in nature study, modeling, drawing, painting, paper folding and cutting; working with head, hands, and heart enjoyably and healthfully.

I heartily agree with the speaker that the child will come to know a flower much more truly through his effort to draw or paint it. But I would go a step further, and say that not only his own expression, but a knowledge of that of others, is necessary to growth. He needs to have his ideals raised by constantly studying the work of those who excel, by noting how others have interpreted the world about them. Indeed, we are told that "the great work of the art teacher is accomplished when he has succeeded in enabling his pupils to gain capacity to appreciate what is good in art;" and again: "The teaching of the practice of art is mainly important as a means of educating the public in appreciation."

Side by side with art expression must go training in art appreciation; the child must *feel* the beautiful, whether in form or conduct, before he can express it, and for this he needs not only to have beautiful forms placed before him, but artistic interpretations of these forms as well.

We have heard "accuracy" mentioned as a thing to be condemned. If an insistence upon mechanically perfect "results" is meant we will all agree with

the speaker, but if definite and true expression of clear thought is "accuracy," then we cannot have too much of it.

All first expression should be spontaneous and is of necessity crude and immature, just as the little child is immature. We value it just in proportion to its being the real expression of childish thought.

We are striving, not to obtain "results," but to guide the little child to see and to feel, and to grow through expression. But we should not be long satisfied with crude results, we should as soon as possible, create a "divine discontent" for crude work and develop a capacity for better.

In the happy unconsciousness of early childhood there are no limitations to the children's undertakings, because they themselves are conscious of none. But this condition is not permanent. With the development of self-consciousness the child begins to realize his limitations and to long for greater power, and it is our duty to help him to acquire it.

Greater mental ability should now be required in their work, and an accuracy which is the result of clear, definite thought. The pupils should have high ideals of technical excellence, and should be held to them. Only in this way will they themselves be satisfied.

If for no other reason than the mental discipline involved the study of perspective principles is well worth while. To think out the problem of a flight of steps embodied in the cube requires as great mental power as a problem in algebra and yields a much more tangible return.

The question has been asked: "Why study types? Why handle wooden blocks when nature is spread out before the child?" and I answer, because the type brings a something to the child which even nature cannot give. It feeds the imagination, it deals in symbolism. The type is never simply a piece of wood *to a child*, it is a key unlocking all the forms of the universe. By means of it the child binds up all past experiences, and through it reaches out to new forms, arranging, classifying, and systematizing that which before was a confused mass in his mind. It reveals in a wonderful way the divine order and plan of the universe.

It was recently my privilege to be invited to meet a little girl of four years at her summer home on the seashore. She was in the midst of natural beauties, the sea rolling in but a stone's throw from the cottage, while flowers grew in profusion all about the place.

In the evening, as I sat beside her, watching her preparations for the night, the most important of which was the disrobing and putting to bed of her favorite doll, I happened to take hold of a string and pull out from its hiding place a stick about a foot long, a rude piece of wood. "Oh!" I exclaimed, "is this your horse?" "No," she replied, indignantly, "it's my dog!" The next morning when I apologized to her for my blunder she graciously replied that *it could just as well have been a horse as a dog, had she wanted a horse*. So, you see, in this case a block of wood, transformed in the alembic of a child's imagination, supplied a need which all the beauties of nature had failed to meet.

Replying to the charge against outline drawing, I cannot do better than quote Mr. La Farge.

Speaking of the Samoan children's drawing in the wet sand the outlines of fish and birds, he says: "I marvelled at the fact that the savage—the beginner in thinking—was representing these things chosen out by him, in the most abstract conceivable form." He speaks of these drawings as "a synthesis of nature, not a copy," and then goes on to say: "What is astonishing is that the symbolical

character of an outline drawing . . . is the mode of art of the savage; it is the mode of art that children understand and first care for. Conventional art, which one would think ought to repel them, is, on the contrary, the most suggestive and the most delightful." And he explains this by calling attention to the child's "power of accepting illusions," and to the play of the imagination thus afforded.

DEPARTMENT OF SECONDARY EDUCATION.

SECRETARY'S MINUTES.

FIRST SESSION.—WEDNESDAY AFTERNOON, 2:30, JULY 8, 1896.

The department met at 2:30 p. m. in the North Presbyterian Church, President Edward L. Harris in the chair.

An address of welcome was presented on behalf of the secondary teachers of Buffalo by Principal F. A. Vogt of Buffalo High School. He invited the department to a reception on the following evening in the Chapter House of the Women Teachers' Association.

President Harris responded to the address of welcome and spoke briefly of the important educational movements of the year, referring especially to the work of the Committee on College Entrance Requirements, and calling attention to the fact that the appointment of this committee was due to the initiative of the Department of Secondary Education at Denver last year.

Dr. Ray Greene Huling of Cambridge, Mass., offered the following resolution, which was unanimously adopted:

Resolved, That the members of the Secondary Department hereby extend their hearty thanks to Mr. Detmers, Miss Somerville, the young ladies and gentlemen of the Buffalo High School who appeared upon the stage, and all others who had a share in the presentation of "An Old-Time Tea Party" on Tuesday evening, desiring in this way to express our delight at the highly successful representation of the Revolutionary scenes which formed the basis of the drama, and also our deep appreciation of the kindly spirit which prompted so much effort for the entertainment of strangers,—strangers, indeed, we were before that evening, but forevermore cordial friends the Buffalo High School.

The President then appointed the following Nominating Committee:

Principal F. L. Bliss, Detroit High School; Principal C. I. Parker, Chicago, Ill.; Principal W. H. Smiley, Denver, Colo.; Principal E. W. Coy, Cincinnati, Ohio; Dr. Amelia Earl Trant, Buffalo, N. Y.

The meeting then adjourned to reassemble in round-table conference as follows:

ROUND TABLES.

Ancient Languages, and English.—Joint Session (Auditorium).

Chairman.—I. B. Burgess, Morgan Park Academy, Morgan Park, Ill.

Leaders.—Wm. C. Collar, Roxbury Latin School, Roxbury, Mass.; F. A. Manny, High School Moline, Ill.

Topic.—Translation from the Greek and Latin Classics as a Training in the use of English.

Modern Foreign Languages.—(Primary Class Room).

Chairman.—Oscar Faulhaber, Robinson Seminary, Exeter, N. H.

Leader.—Joseph Krug, Central High School, Cleveland, Ohio.

Topics.—The Study of the German Language as an Educational Factor in Anglo-Saxon Countries; Review of the latest changes in Methods, with special reference to the "Natural" and "Inductive" Methods.

History.—(Church Parlors).

Chairman.—Ray Greene Huling, English High School, Cambridge, Mass.

Leader.—Wilson Farrand, Newark Academy, Newark, N. J.

Topics.—The Library Method in History; College Admission Examinations in History; Helps to the Study of History in Secondary Schools.

Mathematics.—(Sunday School Room).*Chairman.*—William A. Greeson, Dean of Lewis Institute, Chicago, Ill.*Leader.*—James L. Patterson, Union College, Schenectady, N. Y.*Paper.*—Economy in Mathematical Instruction. By James L. Patterson.

Topics grouped under the above head for general discussion; (1) Arithmetic in secondary schools; can it be dispensed with? If not, how much time should be given to it, and in what year? (2) In what order should the subjects in algebra be introduced? (3) When and how should negative exponents be taught to beginners in algebra? (4) The treatment of factoring so as to include the solution of equations. (5) Should algebra and geometry be taught contemporaneously or consecutively, or, in general, what is the best arrangement of a course in algebra and geometry? (6) Should solid geometry be included in the courses leading to college?

Natural Sciences.—(Lecture Room).*Chairman.*—H. N. Chute, High School, Ann Arbor, Mich.*Leader.*—George R. Twiss, Central High School, Cleveland, Ohio.

Topics.—What are the difficulties encountered in adjusting a secondary course of physics involving laboratory work? How may they be overcome? What kind and number of quantitative experiments in chemistry should be made in a high-school course?

Principals.—(Bible Class Room).*Chairman.*—F. L. Bliss, High School, Detroit, Mich.*Leader.*—G. F. Jewett, High School, Youngstown, Ohio.

Topics.—To what extent should promotions be allowed in one department, with failures in another? The nature and propriety of opening exercises; special teachers.

SECOND SESSION.—THURSDAY AFTERNOON, JULY 9TH.

Joint session of the Departments of Secondary and Higher Education.

These departments met at 2:30 p. m. in the North Presbyterian Church, President J. H. Baker of the Department of Higher Education in the chair. The chair was afterward taken by President Harris of the Department of Secondary Education.

The Department deviated from the printed programme and took up first the report of the Committee on Uniform College Entrance Examinations. The preliminary work of the committee was printed in the June *School Review*, copies of which were distributed in the assembly room.

Dr. B. A. Hinsdale, of the University of Michigan, for the committee, presented the following plan of work for 1896-'7.

COMMITTEE ON COLLEGE ENTRANCE REQUIREMENTS.

REPORT ON PLAN OF WORK FOR 1896-7.

It is within the province of the Committee, according to the resolution passed at the Denver meeting, to investigate existing college entrance requirements and to report on ways and means of securing such uniformity in extent and method as will be conducive to the best interests both of higher and of secondary education. The first step—investigation of existing requirements—has been taken. In our opinion the programme of the ensuing year should be chiefly as follows:

(1) The committee should invite the active co-operation of associations already organized for the study of such problems; it should appoint representative subcommittees of specialists interested in the various subjects; it should ascertain the views of individual institutions,—secondary schools, colleges and universities,—all with a view to the ultimate determination of what should constitute a normal requirement in each of the subjects set for admission to college.

(2) To this end it is recommended that the requirements be considered in the following groups: English, classical languages, modern languages, history, mathematics, and sciences.

(3) Within the several groups special attention should be given to what should constitute a year's work in each subject, (e. g. first year French, second year French, physics, chemistry, etc.) or, as may be preferable in some groups, what should constitute the "elementary" and what the "advanced" requirements, and, in general, the constitution of entire courses of study in the separate subjects.

(4) It is recommended that a schedule of options or equivalents within the various groups, or between separate groups, be prepared.

(5) The committee should make special effort to secure a more satisfactory method of admission to college. The views of the associations, subcommittees and institutions (above referred to) should be sought as to the best pedagogical means of testing the work done in preparation for college.

(6) All partial reports should be submitted to the Committee as early as possible that a tentative report may be prepared for discussion at the next annual meeting of the National Educational Association.

(7) The Departments of Higher and of Secondary Education, and of Science, should be requested to make this subject a special order in their programmes for the meetings in 1897.

(8) It is evident that the work outlined cannot be done without the expenditure of a considerable sum of money. This committee should urge upon the Departments of Higher Education, of Secondary Education, and of Science the necessity of petitioning the Board of Directors of the National Educational Association for an appropriation to be made at as early a day as practicable, sufficient to complete the work.

The Secretary gave an oral report of the committee for the year. The report of the committee was accepted and adopted. On motion the same committee was ordered continued. The officers of the Departments were authorized to fill vacancies in the committee.

Principal W. H. Smiley, of Denver, Colo., Secretary of the Joint Committee, called a meeting of the committee at 9:30 the following morning at the Genesee House.

Principal E. W. Coy, of the Hughes High School, Cincinnati, presented to the association the report of the Committee of Twelve of the American Philological Association on the subject of the study of Latin and offered the following resolution:

Resolved, That the report on Latin of the committee of Twelve of the American Philological Association meets with the cordial approval of the Departments of Higher and Secondary Education of the National Educational Association.

The resolution was supported by Professor Andrew F. West, of Princeton University, Principal O. D. Robinson, of the Albany High School, N. Y., and Principal J. Remsen Bishop, of the Walnut Hills High School, Cincinnati, O. It was unanimously carried.

Principal W. H. Smiley, of the Denver High School, moved that the Departments present a joint request to the Directors of the National Educational Association that the report of the Committee of Twelve of the American Philological Association on the Study of Latin as presented to the meeting by Principal Coy be printed in full in the minutes of the National Educational Association.

This motion was unanimously carried.

The following resolution offered by President Joseph Swain, of the University of Indiana, was unanimously carried:

Resolved, That Departments of Higher and Secondary Education in joint meeting respectfully petition the Board of Directors of the National Educational Association to appropriate the sum of \$2500 at as early a day as may be practicable for the purpose of continuing the work of the Joint Committee of these Departments on College Entrance Requirements.

Principal W. H. Wicks, of Syracuse, N. Y., delivered an address on "Congressional Work for Youth."

President J. G. Schurman, of Cornell University, addressed the joint session on the question, "What Is a Secondary School?"

Discussion by Principal E. W. McCoy, of the Hughes High School, Cincinnati, Professor B. A. Hinsdale, of the University of Michigan, and Dr. Ray Greene Huling, of Cambridge, Mass.

On motion the meeting of the joint Departments was adjourned. The two Departments assembled immediately afterward for a business session.

SECOND SESSION.—THURSDAY AFTERNOON, JULY 9TH.

President Harris again announced the reception to the Department in the evening.

The following report of the Committee on Nominations was presented by the chairman, Principal F. L. Bliss:

President, C. H. Thurber, Dean of the Morgan Park Academy of The University of Chicago.
Vice President, Principal Frank L. Fosdick, Buffalo High School Annex.
Secretary, Ida B. Haslup, Principal of High School, Pueblo, Colo.

On motion of Principal B. C. Matthews, of Newark, N. J., the thanks of the Department were extended to the members and trustees of the North Presbyterian Church for their hospitality in allowing the use of their building for the meetings of the Department.

On motion the Department adjourned.

C. H. THURBER, *Secretary*.

AMERICAN PHILOLOGICAL ASSOCIATION.

*REPORT OF THE COMMITTEE OF TWELVE ON THE STUDY OF LATIN, JUNE, 1896.

The programmes of secondary education put out by the Committee of Ten in their report published in 1893 proposed the reduction of Greek preparatory studies from three years to two, and the reduction of Latin preparatory studies from five periods a year for four years to five periods a year for the first two years and four periods for the remaining two years.

The harm which would have been worked by the acceptance of the proposition with regard to Greek was so great and unmistakable that immediate and unhesitating protest was demanded. Accordingly the American Philological Association, at a large meeting held in Philadelphia, December 28, 1894, unanimously adopted a motion (now generally made known throughout the country) that in any programme designed to prepare students for the classical course not less than three years of instruction in Greek should be required.

The harm which would have been worked by the acceptance of the proposition of the Committee of Ten with regard to Latin was appreciable, and the point of view from which the reduction in that subject was made was a dangerous one. Nevertheless, since the proposed reduction in Greek was the more serious of the two, the Philological Association confined its immediate expression of opinion to that subject, charging its Committee of Twelve, however, with the further duty of considering the questions involved in the propositions with regard to Latin. The committee accordingly gave the question careful thought, and conferred also with a large number of other members of the Association engaged in the teaching of languages, ancient or modern, in schools or colleges. It found a striking harmony of opinion, which was further evinced at the meeting of the American Philological Association, held in Cleveland on July 13, 1895, by a unanimous passage of the following resolution.

"The American Philological Association is of the opinion that the best interests of education demand the retention of the full amount of five weekly periods for four years now generally given to Latin, throughout the country, by schools that have a four-year course. And it would be glad to see an increase of the number of years devoted to the subject, either through an extension of the high-school course to five or six years, or through the carrying of some of the high-school subjects into the grammar-school curriculum."

The Association recognizes the fact that the prevailing crowding and lack of uniformity in our secondary education in America are serious evils. Accordingly it is in sympathy with the desire of the Committee of Ten to relieve the present congestion of studies and at the same time construct a rational programme or series of programmes which might everywhere be adopted; but the Association differs radically from that committee with regard to the method to be employed. It is of course clear that, under the present circumstances of increasing demands for time on the part of many of the so-called newer subjects, the results desired cannot be obtained unless there is either a general reduction of the time given to each subject or a complete omission of some of the subjects or a relegation of some of them, in whole or in part, to the grammar-school grade. In the judgment of the Philological Association the first method, which was the one proposed by the Committee of Ten, is not the true one. It is not best to relieve an overcrowded programme by reducing studies that are of central importance. It is better in any case to make sure that the few essential things in any programme

*This report was prepared by a special subcommittee consisting of the four professors of Latin on the committee, and has been approved by the other members without change.

of study, whether classical or scientific or of any other kind, are given their full weight and effectiveness, than to teach many things incompletely because of an insufficient allotment of time.

It is to be clearly understood that the Association is not now concerned with the question whether every-one should be required to study Latin, but is simply laying down the proposition that those who do desire to study it should find a sufficient amount of time devoted to it to enable them to gain the best results. In point of fact there seems to have been a general agreement that five periods a week for four years is none too large an amount to assign to the subject. No demand for a reduction from this amount has come from the schools themselves. On the contrary it seems to be generally recognized that a larger amount of time, rather than a smaller, ought to be given to the subject of Latin. In a number of schools in different parts of the country courses of five or six years have already been developed; and the feeling which led to this movement found formal expression, at the meeting of a large and widely representative Classical Conference held at Ann Arbor in March, 1895, in the passage, without a dissenting vote, of a resolution in favor of a six-year course.

This belief in a longer course, rather than a shorter one, appears most natural to one who studies the problems of education not simply from the point of view of American experiments, but with knowledge of the experience of other countries as well. Our better schools usually provide four years for the study of Latin, with five exercises a week. If to this amount be added the two years of Latin regarded as normal by colleges which prescribe a part of their work, American education has at best a six-year Latin course to present as against the nine-year or ten-year course found in Germany and England. Moreover, the number of weekly exercises given to the subject is smaller in this country than in Europe. A reduction to a still lower standard such as is proposed by the Committee of Ten, would be uncalled for and unfortunate. We protest against it, because such a reduction would tend to cripple the study of Latin and other studies which are appreciably affected by its welfare, and because such a reduction would postpone the hopes we entertain that Latin studies will be developed in this country until the opportunities afforded equal the best open to students in the old world. We therefore appeal to our universities, our colleges, and our schools, and to all friends of sound education, in whatever occupation, to see to it that our preparatory Latin, in place of being weakened, is strengthened and developed as soon as practicable into something more substantial than we now possess. To this end we especially ask the co-operation, not only of all classical teachers, but of those who are interested in our own and other modern languages; and in general, we ask the support of all men who believe in a well-rounded liberal education, in which literary studies constitute an indispensable part.

WILLIAM W. GOODWIN, Professor of Greek, Harvard University, *Chairman*.
 CECIL F. P. BANCROFT, Principal of Phillips Andover Academy.
 FRANKLIN CARTER, President of Williams College.
 WILLIAM G. HALE, Professor of Latin, University of Chicago.
 WILLIAM R. HARPER, President of the University of Chicago.
 FRANCIS W. KELSEY, Professor of Latin, University of Michigan.
 GEORGE L. KITTREDGE, Professor of English, Harvard University.
 ABBY LEACH, Professor of Greek, Vassar College.
 THOMAS D. SEYMOUR, Professor of Greek, Yale University.
 CHARLES F. SMITH, Professor of Greek, University of Wisconsin.
 MINTON WARREN, Professor of Latin, Johns Hopkins University.
 ANDREW F. WEST, Professor of Latin, Princeton University.

June, 1896.

The undersigned, not members of the American Philological Association, approve the position taken by the association in the resolution of July 13, 1895, and unite with the committee in their appeal, as expressed in the final paragraph of the accompanying report.

GEORGE B. AITON, Inspector of State High Schools, Minnesota.
 HARLAN P. AMEN, Principal of Phillips Exeter Academy.
 JAMES W. BASHFORD, President of Ohio Wesleyan University.
 JOHN BINNEY, Professor of Hebrew, etc., in the Berkeley Divinity School, Middletown, Conn.
 J. J. BLAISDELL, Professor of Philosophy, Beloit College.
 RICHARD G. BOONE, Principal of Michigan State Normal School, Ypsilanti.
 C. F. BRACKETT, Professor of Physics, Princeton University.
 JAMES DAVIE BUTLER, LL.D., Madison, Wis.
 W. H. BUTTS, Principal of the Michigan Military Academy, Orchard Lake, Mich.
 FRANCIS J. CHILD, Professor of English, Harvard University.
 JOSEPH H. COIT, Rector of St. Paul's School, Concord, N. H.
 WILLIAM C. COLLAR, Head Master of Roxbury Latin School.
 EUGENE C. COULTER, Head Master of the University School, Chicago.
 T. F. CRANE, Professor of Romance Languages, Cornell University.
 NEWTON C. DOUGHERTY, Superintendent of Schools, Peoria, Ill.; President of the National Educational Association.
 EDWARD D. EATON, President of Beloit College.
 WILSON FARRAND, Associate Master Newark Academy.

- JOSEPH W. FAIRBANKS, Principal of Smith Academy, Washington University, St. Louis.
J. H. FREEMAN, Superintendent of East Side Schools, Aurora, Ill.
GEORGE S. FULLERTON, Vice Provost of the University of Pennsylvania.
JOHN C. GRANT, Principal of the Harvard School, Chicago.
JOHN J. HALSEY, Acting President and Professor of Political and Social Science, Lake Forest University.
THOMAS S. HASTINGS, President of Union Theological Seminary, New York.
B. A. HINSDALE, Professor of the Science and Art of Teaching, University of Michigan.
WILLIAM DEWITT HYDE, President of Bowdoin College.
JULIA J. IRVINE, President of Wellesley College.
GEORGE TRUMBULL LADD, Professor of Philosophy, Yale University.
ALBERT G. LANE, Superintendent of Schools, Chicago.
MOSES MERRILL, Head Master of Public Latin School, Boston.
HUBERT A. NEWTON, Professor of Mathematics, Yale University.
A. F. NIGHTINGALE, Superintendent of High Schools, Chicago.
FRANCIS L. PATTON, President of Princeton University.
HENRY L. PATTENGILL, Superintendent of Public Instruction of the State of Michigan.
OSCAR D. ROBINSON, Principal of High School, Albany; a member of the "Committee of Ten."
AUSTIN SCOTT, President of Rutgers College.
WILLIAM H. SMILEY, Principal of High School, Denver.
EGBERT C. SMYTH, Professor of Ecclesiastical History, Andover.
WILLIAM GREENOUGH THAYER, Head Master of St. Mark's School, Southborough, Mass.
CHARLES S. THORNTON, Member of the Illinois State Board of Education.
C. H. THURBER, of the Department of Pedagogy, University of Chicago; Dean of Morgan Park Academy, Morgan Park, Ill.
CHARLES F. THWING, President of Western Reserve University.
OLIVER S. WESTCOTT, Principal of North Division High School, Chicago.
C. O. WHITMAN, Head Professor of Zoölogy, University of Chicago.
GEORGE E. WOODBERRY, Professor of Literature, Columbia University.
C. A. YOUNG, Professor of Astronomy, Princeton University.

PAPERS AND DISCUSSIONS.

ROUND TABLE.

ANCIENT LANGUAGES AND ENGLISH.

The session of the Round Table of Ancient Languages and English was held in the auditorium of the North Presbyterian Church at 3:30 o'clock, Wednesday afternoon, July 8th. Chairman I. B. Burgess, of Morgan Park Academy, Morgan Park, Ill., read the first paper, introducing the following topic for discussion,

TRANSLATION FROM THE GREEK AND LATIN CLASSICS AS A TRAINING IN THE USE OF ENGLISH.

BY PROFESSOR I. B. BURGESS, MORGAN PARK ACADEMY, ILL.

The basis of my brief remarks this afternoon is the series of resolutions which you have before you in print. In framing these resolutions I had a share and have heard them once discussed. It may be possible to make their meaning and purpose clearer by a few words of comment.

Let me say that it is hoped by some of us that this body will be able to improve these resolutions and send them forth with its authority.

The first resolution reads:

1. More translation *in writing*.

This is the substance of a suggestion insisted upon by Mr. Charles Francis Adams in the *Nation* last fall. It is undoubtedly a good one. The *dictum* of Lord Bacon that "writing makes an exact man," is as true today as ever. A teacher is far more likely to notice deviations from good usage when he sits down to correct a set of papers at leisure than he is in the hurry and distraction of the classroom.

In order to make sure of a generous amount of written work it is well for a teacher to plan definitely for written exercises at regular intervals. Many teachers will find it difficult to get time for a large amount of written work, but any earnest teacher can find time for some. Further, it is an undeniable fact that hundreds of teachers in secondary schools *do* have time for a large amount of written work. Many teachers in secondary schools are not required to hear more than twenty recitations per week, and in many other cases where the number of recitations is larger the number in classes is quite small.

2. Co-operation of English and classical departments by which the papers of the latter department may receive criticism from the former, and *vice versa*.

English teachers will probably find that Latin teachers, in their concentration upon the meaning of the passage and upon the fidelity with which the classic writer's thought has been reproduced, will not be attentive enough to the English form.

Latin teachers in visiting the rooms of their English colleagues and in inspecting English written work, will certainly find that in many cases the English teacher has not been critical enough, that he has been content with the general conception of the meaning of a whole passage, especially if that passage deals with an inspiring idea, and that he has not inspected phrases and clauses sharply enough to bring out the finer shades of meaning.

English teachers are often so engrossed with the literary side of their work that they give too little attention to what may be called the linguistic and scientific side.

3. Animated and carefully prepared oral translations should be given by the teacher; and the student should study for comparison, under the direction of the teacher, literary translations such as are found in Collar's Seventh Book of the *Æneid*, Strachan-Davidson's Cicero, Trollope's Cæsar or Kennedy's Virgil.

The idea of this resolution is well brought out in the introduction to Mr. Collar's admirable little work on the Seventh Book of the *Æneid*. He shows that in expecting good English from pupils who have not had good models of translation before them, we are requiring "bricks without straw."

Will you notice that the resolution guards very carefully against the "pony" idea. The four books referred to contain only limited portions of translation and have been selected for that precise purpose. Of course it will not do for a pupil to translate anything like the whole of his Virgil or Cicero by the aid of another translation.

4. To make clear to the pupil the value of accuracy, beauty, and force in the expression of thought, constantly increasing emphasis should be given to the English form of translation. This emphasis should appear both in time allotment and in grading.

This resolution contains several very distinct suggestions. It is not enough that the pupil's conception of a passage be, in general, clear. It must be, at least during the later years of his preparatory course, precise and exhaustive; the words chosen for English transfer must be in harmony with the spirit of the Latin or Greek passage; the beauty or force of the original should not be lost by an inappropriate choice of words or by an awkward grouping of them.

The resolution recognizes the fact that much more may be expected of a pupil in the later than in the earlier years of his course. It

recognizes the fact that time must be taken generously in the classroom for guiding pupils to a proper choice of words and for helping pupils to correct their own offences against English.

It recognizes the fact also, that the teacher will fail to impress upon the pupil the value of good English unless he distinctly lowers the grade of the pupil who uses poor English. Too often teachers give pupils the impression, by their grading, that in the Latin class they are studying only Latin. They correct mistakes in English, but the pupil sees that if he has the syntax correctly his grade is not affected by the English form of expression.

5. Prudery should be avoided — such as telling pupils never to translate a Latin word by its English derivative; or a Latin perfect participle by an English perfect participle.

It is of course true that pupils are altogether too ready to translate Latin words by their English derivatives. This does not justify us, however, in flying to the other extreme, for there is no page of classic Latin which does not contain several words which may be admirably translated by their English derivatives.

The perfect participle was instanced because Professor Hill, in his "Rhetoric," and Professor Briggs, in a paper before teachers, have taken a position with regard to the use of this participle unsupported by the best usage. Upon this, as upon other matters, the grammar of Professor Whitney is commendably sane and moderate.

If the English of candidates for admission is so unspeakably bad as college instructors would have us believe, it is certainly wise, for the present at least, to leave merely doubtful English uncorrected.

6. Cast-iron "pet phrases" should be avoided, *e. g.*, "march" for *iter facere*.

The example chosen under this heading, "iter facere," is an extremely mild instance of the fault referred to. It was suggested by reading in Trollope's *Cæsar* the translation "do their traveling," where he is speaking of the movements of the Helvetian nation in a body. This seemed to me both admirably unconventional and admirably literal. The phrase is often used where no reference is made to the movement of an army. In such cases the word "march" is inappropriate.

Many teachers of long experience and great conscientiousness have reached conclusions with regard to the proper translation of particular passages which they enforce with so much vigor that the originality of their students is sadly fettered, and really independent work in getting out good translations practically stopped.

Some years ago two boys came to me from another school to be admitted to advanced standing in Cicero. In translating a passage of that author, the boys gave versions which were almost identical, and

yet it would be hard to find two boys more different in their mental make-up and environment than these two boys.

7. A pupil's English should not be judged as a whole from single errors, however bad.

There is, it seems, an irresistible fascination for many minds in the idea that a man's character or a man's knowledge may be infallibly determined by single acts of the man in question. Books of rhetoric and books of etiquette alike abound in expressions which show that their authors are victims of this delusion. It still remains true in the judgment of sane people who are not riding a hobby, that gentlemen do sometimes eat with their knives, and that good English scholars may, under certain circumstances, say "he do n't," or spell separate with an "e" in the center. We cannot help admiring those sound old Romans in their use of that expressive plural "mores."

8. Awkward, uncommon, unidiomatic English should not be confused with absolutely incorrect English.

This resolution counsels moderation, sympathy, cool-headedness under provocation. Many of you will disagree, but still I should allow pupils occasionally to use the literal translation of an ablative absolute in the early part of their Latin study.

I am not horrified by these expressions from those papers in the last Harvard report, at which we are all expected to hold up our hands in holy horror. "This Macedonia that we were wont to see held with a garrison." "The city of the Byzantines, to you and to this government most faithful, has been harassed into an unfriendly mood." The order here is unusual, but the meaning is not obscure.

I note, too, somewhere that an unlucky wight has said "mispropriety" instead of the conventional "impropriety," and yet it seems to me that the boy has got the idea and deserves credit for it.

9. It should be remembered that it is difficult to write good English even after long practice; that truthful translation is more difficult than a general theme, and that idiomatic English is often conventional and illogical.

Translation is more difficult than a general theme because as any thoughtful critic of his own procedure will admit, the writer of a general theme, if he cannot express the precise idea which he has first in mind, will often adapt his language to a less precise but easier expression of the idea. But, in translation, the conscientious student is not permitted to do this by the original before him, and in his effort to be truthful often becomes awkward.

This idea was admirably brought out by Mr. Tetlow at the last meeting of the classic and high school teachers of Massachusetts in remarks reported by Mr. Tetlow himself in the *Boston Transcript* for April 18th.

As to conventional English and its illogical character, note such expressions as "Where did he go?" and "If he comes I shall go." The boy who says "Whither did he go?" and "If he shall have come, I will go," is logical and accurate, and in harmony with the spirit of his Latin, but he is not idiomatic. Now while I would not allow such unidiomatic translation to pass without correction, I should give a pupil credit for his sturdy effort to express the exact thought. I should show by my comments upon his work that I gave him such credit. I should have him understand that training in idiomatic English is in some degree simply an effort to make him follow usage rather than to follow logic. The cold-blooded and harsh comments which teachers and writers often make upon such mistakes as I have just been describing are likely to make pupils less truthful and thoughtful.

The last report of the Harvard Committee on "Composition and Rhetoric" furnishes excellent examples of the statement in this resolution that it is difficult to write good English even after long practice.

On page 277 of that report occurs the following astonishing sentence:

Accepting this plea in extenuation and allowing it all the weight to which it is entitled, it yet remains that, under the existing system, the examination papers indicate unmistakably that a very large portion of the time of the preparatory school course is consumed in exercises which, in result, so far as good English composition is at issue, seems to obscure, at least in the mind of the student, the fundamental principles that every sentence consists of a subject and a predicate, and that clearness in the expression of thought is of the essence of good writing.

This sentence violates rhetoric and common sense alike, by its frequent interjection of parenthetical clauses and phrases. It is precisely the sort of a sentence which, to use its own words, "obscures the fundamental principles that every sentence consists of a subject and a predicate, and that clearness in the expression of thought is of the essence of good writing."

Again, from the same report: "If in consequence of that report any steps in the direction of the reform of the system have been taken, they have not reached the ears of your committee."

That means the steps have not reached the ears of the committee. What do the committee expect? That some one will step on their ears. Note in both sentences above the vicious repetition of the preposition "of," a mannerism which might easily have been avoided by a little care.

I think I have touched here upon a fundamental weakness of both these famous reports from Harvard College. They are notably unsympathetic; another fundamental quality is that they are notably uncritical.

While great credit should be given to the zeal of the gentlemen composing the committee, and while it may be fully admitted that the way to incite attention to this subject is to bring actual specimens of English translation before the college authorities and the public, it must, with equal force, be insisted that the way to produce a reform is not to dump down with exclamations of horror, an unarranged and miscellaneous group of student compositions. Mr. Tetlow, in the report to which I have referred, calls attention to the fact that some of these papers, critically examined, are admirable specimens of English for boys of eighteen or nineteen, written under the limitations that actually existed. I am unable to determine from Mr. Tetlow's paper which one of these he has specially selected to illustrate this proposition.

I should like, however, as a result of my own study of these specimens, to call your attention to No. 12, on page 283. I have examined this passage with the original before me and it proves to be, while most untruthful in its fidelity to the Latin, an admirable specimen of idiomatic English. The pupil who wrote it must have been drilled with remarkable skill in the matter of English expression, and the grade given upon it was given not because of its Latin, which did not deserve so high a grade, but because of its excellence as to English form. How uncritical, then, must have been the work of the committee to present such a passage as an example of the "Egyptian darkness in which no small portion of our undergraduates are sitting."

TRANSLATIONS FROM THE GREEK AND LATIN CLASSICS.

BY WILLIAM C. COLLAR, ROXBURY LATIN SCHOOL, ROXBURY, MASS.

[AN ABSTRACT.]

One of the striking facts in the more recent history of education is the changed and changing position of classical study. Latin and Greek no longer hold the predominance that they once did, nor enjoy their former prestige. They are losing ground almost with every decade; their value as instruments of training is more and more questioned. Everywhere the claims of modern subjects are being vigorously asserted and established; and as the period of education remains just as limited as ever, and as the powers of the mind are not increased, it is clear that only by a still further curtailment of classical studying can room be found for the newer knowledge. All the more

important does it become that right methods of classical study shall be fruitful of the best results.

It is no longer necessary to study Latin and Greek to obtain a knowledge of ancient life and thought, since everything of value for that purpose has been translated. Neither can it be said that the study is indispensable for purposes of general mental training, since a variety of subjects serve, each in its way, to that end. But for acquiring a command of English no substitute can be found so effectual as the practice of translation from Latin and Greek. Yet the danger is constant of adopting or imitating the foreign idiom. While acquiring power to wield the language one may be careless in its use and fall into a style that is un-English in spirit and in form. Hence comes the need of good standards of translation. The learner must first come to know what good translation is, and on what principles it is worked out. All this must be exemplified daily by his teacher, not merely by the fragmentary translation of phrases and isolated sentences, but by continuous translation of the whole lesson.

But such translations are addressed to the ear, and a thousand things escape the learner if he only listens to "winged words." He must be practiced in the study of the best printed translations, comparing word by word, and sentence by sentence, the version and the original. Only in this way will he slowly and unconsciously form for himself correct models of translation and grow to have a painful sense of his own crudities and infelicities. Translation pursued with such guides and with the distinct aim of mastery of expression is the best conceivable exercise in style. The ideas are furnished, attention can be concentrated on the form. It is objected that the use of translations would be conducive to laziness. I ask how? The lesson may be doubled or tripled in length. A literal rendering, as a test of the knowledge of the syntax, may be required wherever the printed version departs from the construction of the original. The learner may be called on to show why a translator chose this or that form of expression; why this or that order of words; how the force of this or that prefix or suffix is conveyed; what the effect would be of this or that substitution. Is anything missed in the translation that is either expressed or suggested in the original? There is no lack of work that may be assigned, and a mind prone to learn will find many and delightful incentives to study, such as accounting for ablatives and subjunctives cannot afford. We shall save classical culture only by making the study fruitful, and by making the students feel that through it they gain appreciation of literature and power of expression, the first as a perennial source of enjoyment, and the last as one of the most potent instruments of human influence

*TRANSLATIONS FROM THE GREEK AND LATIN
CLASSICS.*

BY FRANK A. MANNY, PRINCIPAL HIGH SCHOOL, MOLINE, ILL.

When the resolutions which have just been presented first appeared in the *School Review*, I felt that they marked a distinct advance towards better methods in teaching Greek and Latin and also, what especially interested me as an English teacher, they indicated a movement towards the correlation of English with these subjects. Whatever may be the possibilities of correlation or concentration in general there can be no question that, after the beginning work in these languages, the first department with which there can be union is the English, and I am by no means certain that this cannot be carried even into the beginning work. Almost every one of these resolutions calls for work which gives a reason for the hope that it is within the English teacher.

On another account do I consider these resolutions valuable; there is found in many schools an unreasonable feeling that it takes more time to teach science and English than it does to teach foreign languages and mathematics. Even on the part of English teachers assembled we hear of the necessity of a larger proportion of teachers for that branch than for others. I am heartily in sympathy with the demand for more time for instructors in my own line, and I think it is true that science and English as taught in many schools do require more time, yet there is no intrinsic reason why the other subjects of a secondary school curriculum, when taught by the best methods, should not be subject to the same demand.

While working on this problem in the past I have tried some experiments which no doubt to many of you are old stories, yet I offer them for what they are worth. In these days of paragraph writing and daily themes (with which I am entirely in accord) we are apt to get away from a valuable part of composition work — the long essay; in no way can this lack be met better than by a written translation of a short oration, or of a part of the *Æneid* or *Iliad*, which is complete in itself. A single topic in either of these poems about which the student gathers material during his whole study affords him an exercise not to be met elsewhere in his course. Written translations of the simple powers of other authors than those ordinarily studied give the student a breadth of view and a chance for the study of diction not offered in our regular programme.

One of the most interesting opportunities for combination is found in the study of Cicero. Too often his orations are studied as a thing apart from all other literature. Why should not the time now given to this author, together with part of the time for English during the same year, be used for a study of orators and oratory? If the school has a definite course in literature and composition, by this time the pupils will be ready for careful discussion of argumentation and the writing of exercises of this kind. Let this be followed by a study of a few great orators and their best orations. Here is an opportunity for accumulating material for most valuable comparison later, and also for the use of translations. One always wishes that a Cicero class might have a chance to become familiar with more than the six or seven orations that are usually read, and by taking up in class good translations of other orations several ends can be served. By such work as this before the translation is begun the student can surely get a better understanding of the subject than often is the case. A friend who has tried a part of this scheme, using only the time allotted to Cicero, says that she has secured in that time much better interest than ever before and a better quality of translation without in any way losing sight of the syntax or other aims of the course.

The *Æneid* can be treated as the main part of a course in epic poetry. While we have not been able to try this plan yet an unusual opportunity for co-operation was afforded this last year by the presence of the Virgil teacher as a member of the senior English class (a two-hour course in the drama) with marked results in both classes. One objection that may be raised is that the English class often contains pupils outside the Latin course. I do not think this need stand in the way, for by this stage much of the work must be individual, and the very fact that there is union between several subjects adds to the interest and gives to the pupils an appreciation of the scope of the school.

The great objection to these resolutions and to these suggestions is that so much more time is required than the teachers can give. I believe that the fundamental difficulty here is frequently in the organization of the school; principals and head masters are often chosen for any other reason than for executive ability; in several cases where I have met this complaint of lack of time, an investigation has shown that teachers are burdened not by teaching, but by other work which could be done much more satisfactorily in the office by help which could be obtained at a fraction of the teacher's salary. A little direction of pupil assistance makes the problem easier. There are always some members of a class who can easily do more than they are doing, and to whom the organization of library material and a hundred other

details can be entrusted with the best results to all concerned. A school which has the credit system can easily adjust credit for such pupils, as also for additional work in the courses above mentioned.

I feel very certain that this unification well directed cannot fail to prove an advantage, and that the average pupil at the end of the twelfth grade will have a better knowledge of Latin and Greek and will be better able to express himself in writing and in speech than at present; and that, whether he go to college or into some other form of life, many of the problems he will meet will be simpler for him.

DISCUSSION.

PROFESSOR A. C. RICHARDSON, of the State Normal School, Buffalo, N. Y.—I think Mr. Collar has sounded a note of alarm, and all of us will do well to heed. I have myself thought that the study of Greek and Latin is losing its prestige. The fault, however, does not lie in the preparatory school. It lies in the college. In all the colleges but one that I know of, Greek and Latin grammar are given as among the topics in which examinations must be taken. These topics are required not as aids in the translation of Greek and Latin, but as subjects distinct and by themselves. If we can get rid of this antiquated method in the requirements for college entrance examinations we shall accomplish a great deal. Another difficulty lies in the requirement by the colleges of the use of special passages for translation. We are required to chew sawdust in building the bridge to Germany instead of thrilling with interest over Cæsar's relief of the beleaguered forces of Cicero. I do not believe that the four orations against Cataline are of the best, but they must be read. Let us devote our efforts to removing these mechanical requirements for admission to colleges.

PROFESSOR GEORGE T. WINSTON, of the University of North Carolina, President of the Southern Association of Schools and Colleges, said that he heartily endorsed the ideas expressed by Mr. Collar. He believed that lack of vocabulary was one of the principal difficulties in the translation of Latin; that the use of the dictionary is more or less mechanical, and that the use of special vocabularies is still more so. Lack of sufficient vocabulary and not the right words in vocabularies that are furnished are the main difficulties. Given four-fifths of the words in a Latin sentence, and a bright pupil can guess out or reason out the rest of the words, and in his translation he will give a bright and original meaning to the sentence by the words which he uses, which he will not get if he uses a vocabulary or a dictionary. A number of Latin authors equally easy should be read, instead of moving rapidly from easy writers to harder ones. The pupil should write much Latin into good English, and *vice versa*.

In my section there is a constant increase in the study of the classics. There is an old law in South Carolina forbidding the teaching of Latin in certain large cities, but the popularity of Latin teaching is increasing in that state. The Latin language will conquer opposition as the Latin race conquered the barbaric nations of the North. In the South we have had difficulty in securing co-operation from the schools and universities in raising the standard of entrance requirements in the classics, but the co-operation is coming.

PROFESSOR SMITH, of the University of South Dakota, dwelt upon the objections to the use of the alphabetical vocabulary. He said that one of the most profitable language classes he ever taught received by dictation from him the first twenty lines of Homer, and during the reading of the first three books of the Iliad they were not allowed to use a vocabulary. Teachers spend too much time in teaching rare constructions. A Latin book will some time be published which shall contain the text, a literal translation of the first few pages, containing say 500 different Latin words; then a literary translation, and afterwards a vocabulary in the order of pages. Synonyms should be given and copious notes defining new words in the Latin or Greek words already had. A collection of forms used by a particular author should be made. After the first working over of the text, when a literal translation may be given, the teacher should accept nothing but clear-cut, idiomatic English straight through.

MR. HORACE GOODHUE, Professor of Greek, Carleton College, Northfield, Minn., said: I do not fully share the fears expressed about the growth and unpopularity of Latin and Greek—"By their fruits ye shall know them." We know the fruits of Latin and Greek instruction; if there are other studies that will bear better fruits we want them and they will come; but so far, we find no new studies that will take the place of Latin and Greek in furnishing thorough training and culture. In my classes I have found daily and constant drill on lists of new Greek words which I have written on the board most valuable in giving my students ready vocabularies in the language. I have drilled them also in the effects of suffixes and affixes; in this way, by learning a few words together with the suffixes and affixes, they have been able to get a good, practical working vocabulary without the mechanical use of the lexicon. The thing upon which I should dwell with especial emphasis is, that the pupils must know the forms of words; he must know the tense, mode, and voice, and know it quickly; if he does not, all his work is guess work. A perfect knowledge of forms is of main importance.

MR. E. W. COY, Principal of Hughes High School, Cincinnati, said he was sorry to believe that the classical studies were losing prestige. He did not agree with Mr. Collar in advising the use of translation. He has had a number of boys in his classes who used translations, and so far as he had observed, they avail little. A metrical translation of Virgil is a good thing for use in class in the hands of teachers, not in the hands of young pupils. I wish to dwell upon a point made in regard to the unfortunate nature of college entrance examinations. In looking over work that some of my boys were obliged to take in preparing for entrance to Yale, I found that among other things thirty minutes were given for answering a list of history questions for any one of which I should require fifteen minutes. That sort of thing is a perfect outrage. I believe that good English should be insisted upon in translation from the start; that an idiomatic English translation of the ablative absolute should first be learned, then, afterwards, the literal translation may be studied for the sake of the syntax.

In response to a question from Mr. Briggs, of Buffalo, as to Mr. Collar's estimate of the value of sight reading, Mr. Collar made a few remarks as to his position on the use of translations. He read from an introduction to his translation of the Seventh Book of the *Æneid*, in which he deplores the use of translations by pupils as injurious to their character. "I do not advise," said he, "the indiscriminate use of translations chosen by the pupils themselves. In all cases the school should control these translations and they should be used only under the direction of the teacher." As to the question asked about sight translation, I

think of it very highly, indeed, but I do not believe in the Harvard test of exclusively sight translations. It affords a test of power, but not of genuine acquisition of knowledge in the language. Few boys have the power of divination sufficient to enable them to pass a creditable examination in this work, although they know a great deal about Latin. I think that the Harvard examiners would do well to take counsel of the schoolmasters.

PRINCIPAL J. REMSEN BISHOP, of the Walnut Hills High School, Cincinnati, said, I am more concerned about English than about Latin and Greek. The culture of the world is gathered about the Latin and Greek languages and there is no danger of the people condemning them, but English in the schools today is in a very bad condition. I know it from my own school and from others. The importance of the study is not shown by the time allotment in our school curricula. I teach Virgil among other things, and I mark the pupil down closely when he uses poor English in translation; it is one of the most effective methods of teaching English that I have found. I hope that we shall go home determined that if we do not get over so much Virgil or Cicero, or do not drill so hard on forms, that we shall have the best English we can possibly get. I do not agree with the idea of co-operation of English and Classical departments; I want the classical teachers to do it all.

MR. WINSTON explained Mr. Collar's position as to the use of translation in the classroom, and expressed himself as in hearty accord with that gentleman's views of the value of a good literary and metrical translation as a model for the pupils.

PROFESSOR F.W. KELSEY, of the University of Michigan, said in regard to the matter of the use by teachers of certain pet expressions in translation, that the teacher ought to guard with special care against the use of unfortunate expressions in the class-room. The teacher's style of expression here has the greatest influence in shaping the character of the translation made by the pupils. I do not agree in the fear expressed that the classics are losing prestige. The classics were never before so strong in this country. Twenty years ago Greek was losing ground and Latin was losing ground; now certain things indicate the trend of public opinion in the opposite direction. Scientific schools are insisting on one or more of the classics in preparation for entrance. Notable among these are the Massachusetts Institute of Technology and the Sheffield Scientific School. The Dental and Medical Departments of the University of Michigan have recently added Latin to the requirements for admission. These are not isolated cases. Many more might be cited to show the great increase in the demand for a knowledge of the classics. The fundamental principle of the whole question has to do with Latin and Greek as instruments of education. It has been found that these furnish a training and culture which comes from the pursuit of no other studies. The present trend of education lays stress on the necessity of gathering together and handling masses of facts; and this has given rise to scientific methods. No power will be more useful than this. In order to cultivate this power schools all over the country are equipped laboratories. The question is yet to be determined how far this sort of study may be profitably pursued. With an outfit of books costing seven dollars, and a skillful instructor, a pupil can have something of the same thing for the development of his intellectual life through the study of the languages which we are accustomed to associate only with the study of natural science.

ROUND TABLE.

MODERN FOREIGN LANGUAGES.

The meeting was called to order on Wednesday, July 8th, at 3:15 p. m., by Professor Joseph Krug, of the Central High School, of Cleveland, Ohio. Owing to the absence of the chairman, Professor Oscar Faulhaber, of Robinson Seminary, Exeter, N. H., Professor Krug was called to the chair. Professor H. M. Ferren, of the High School, of Allegheny, Pa., was elected as Recording Secretary.

Professor Krug read a paper on the following topic:

*THE RECENT CHANGES IN METHODS OF TEACHING
FOREIGN LANGUAGES.*

BY PROFESSOR JOSEPH KRUG, CENTRAL HIGH SCHOOL, CLEVELAND, OHIO.

Within the last twenty or thirty years many important changes and improvements have been made in the methods of instruction in foreign modern languages. It is found that a purely literary knowledge of such languages is insufficient, and that the faculty of thinking and speaking in them is the chief attainment to be sought. Former methods which rested upon those in use for the instruction in the classical languages had to undergo radical changes, and earnest attempts were made to reform them on a thoroughly natural and practical basis. The offsprings of these new perceptions are the so-called "natural methods." I say "methods," because there is more than one of them, although there ought to only one, as there can be only one natural way for any physical or intellectual action. I also say "the so-called natural methods," because there are still thousands of teachers who are thinking differently as to the natural method of teaching a language.

The main basis of our modern "natural methods" is the object lesson. And just in this regard they are not so new as might at first be supposed, nor so original as their promulgators would wish us to believe. A pedagogue of no less authority than Comenius was among the first to attempt to teach Latin in a natural way, by pointing out and naming objects and by the use of continued questions and answers. Jacotot followed, and by his methods of reading Cæsar gave a new and strong impulse to the movement. Ollendorff and his disciples published improved text-books pursuing the same aim but limiting the means to merely colloquial exercises. Thus, from the very beginning of the reform, three characteristic methods could be distinguished. They have all been maintained and more or less developed; they are

all still in existence and frequent application. Permit me to call them: (a) The objective method—beginning with Comenius and his contemporary pedagogues, and finding its latest development in the Berlitz method; (b) The literary or analytical method, from Jacotot to Toussaint-Langenscheidt; (c) The merely colloquial method, which has its representatives in Ollendorff and his many imitators. All the other modern methods—and there are legions of them—incline more or less toward one or the other of these three.

It is often observed that improved methods upon any field of intellectual activity do not always lead directly to the end desired, their progress being depicted by a zigzag line. Poor results following an application of fallacious systems arouse an unmerciful criticism; the old methods are condemned without discrimination and the demands for new ways and means become general. Improvements are then made, but in their zeal the advocates of "the new" proceed to extremes, and a reaction which we may call a second revision necessarily takes place before the right course is clearly determined.

We today witness such a process taking place in the development of the methods of instruction in modern languages. The first halting station has been reached, and it is generally conceded that reforms are necessary. Unfruitful cramming of abstract grammatical rules, the knowledge of which the pupils were formerly expected to demonstrate by an application to unnatural sentences rendered artificially more difficult by numerous traps; the careless treatment of the phonetic elements in comparison with the prominence given to the written language; the utter neglect of verbal expression in the foreign idiom; the preference given to old-fashioned reading matter, encumbered by a high-flown and pedantic style, and strongly flavored with home-made morality—these and many similar features of the old, one-sided grammatical regimen were earnestly attacked by a new generation which became convinced that the students' precious hours should not be wasted in sterile reasoning *about* a language, when they might be profitably invested for the purpose of acquiring practical knowledge and mastership. Attention was therefore directed in the first place to sound as heard, not as fixed upon the printed page. Phonetic studies were entered upon with much devotion, and were aided by accurate sound description, in order that the study might be emancipated from the doubtful historical traditions of written language. Instruction in formal grammar was reduced to the most indispensable rules, created anew in a purely empiric manner through direct perception. Conversation was generally encouraged. Reading matter was taken from popular and modern books of easy, flowing diction.

All these changes and improvements rested upon sound principles.

They were the results of careful observation, of experience in teaching, and of disappointment in the old methods. If any one of the reformers had succeeded in combining them into *one* great and modern system, the result would be glorious, and the device for teaching the reading, writing, and speaking of a language within six weeks—I beg your pardon; let us say six months—might cease to be a fable. These prospects, however, are in the remote future. Moreover, it soon became apparent that in most instances the alterations were too radical, that the progress in some directions had been too hasty—perhaps too much forced or artificially promoted, or had been in the wrong direction. By emphasizing a certain prominent improvement the teachers had lost sight of other no less prominent features of linguistic instruction; some placed the entire task upon the memory and dismissed reason as an active factor, others applied exclusively to reason and abstained from all memorizing or learning by heart. Thus it has come that you find more partiality, one-sidedness, monotony, and exaggeration in any one of the modern methods than in all the old ones combined.

But before passing final judgment let us review those of the new methods that stand foremost and have become indicative in certain lines of reforms. Almost all claim the attribute “natural.” I have already said that only *one* natural way or method of any physical or mental action can be thought of. I admit, however, the fact that there is a marked difference between the acquisition of a language in the years of early childhood and the same intellectual process at a somewhat mature age. The child has many advantages: the flexibility of the organs of speech, a still fresh and not yet overtaxed memory, which will receive and preserve everything new with readiness; an almost undivided interest and attention which concentrate the energy upon one and the same object of observation. What seems to be an advantage for the adult very frequently is indeed a great hindrance, or, at least, an obstacle. I refer to the more mature power of thought and judgment not yet developed within the child's mind. The child will receive everything strange or new involuntarily, as a matter of course, and without much effort or pains on his part. Not so the adult. He will have to invest time and strength, he will meet numerous obstacles not at all noticed by the child, he will be in never-ceasing struggle with the “why?” and the “because,” and will find the new tongue to be acquired in frequent contradiction with the vernacular. His way of mastering the new idiom must therefore be somewhat different from the ways of infants. The natural method of studying a second tongue is absolutely different at advanced age. Rosenthal—in the preface to his “Meisterschaft” system,—says: “It

must have become conspicuous to every thinking man that children coming to foreign countries will acquire the foreign language within a few months. No grammar, no books, no teachers assist them. Without ability to read or write, they will express themselves fluently and correctly. Small, limited, apparently insufficient as his new vocabulary must be, the young child makes skillful use of it and applies the words appropriately. And it is by no means the smart, the quick, or the talented child alone who will do so. No, it is *the* child, *every* child, whether bright or dull, quick or slow. There must consequently be a certain instinctive and natural system or method at the bottom of these facts, a method which, in direct contrast and opposition to our school methods, will lead always and under any circumstances to the faculty of *speaking*, to the real *mastership* of the language."

There is a good deal of truth in these words. One fact, however, has been overlooked or perhaps ignored by Rosenthal. The child has only one purpose, and even this purpose is an involuntary one, really not even known to the child. It is the speaking only—the faculty or ability of expression—nothing else, nothing beyond. The adult—and with him the pupil of our schools—has to struggle with the reading, the writing, the speaking, and, moreover, with his own native tongue which seems to take a hostile position from the very first moment of studying a second language. In this way time, strength, and energy of the pupil are scattered and weakened, while the infant naturally concentrates and strengthens his powers, no matter how feeble they may be. Another important fact ignored by Rosenthal and others is this: The circle of observation and the supply of perceptions are very small for the child. He will therefore simply ignore in the foreign idiom all words or phrases which do not pertain to his childish perceptions, or are too heavy in meaning or value for his childish mind.

The natural methods which we received from abroad were originally intended for adults. The method Toussaint-Langenscheidt, the Meisterschaft system by Rosenthal, the Berlitz method or system, the Gouin method, even the far more simple methods of Ollendorff and Gaspey-Sauer—all were planned not for children, nor even for younger pupils in schools, but for people of mature minds and age. Some of these methods bear the labels "for self-study," "without a leader," "within six months," and the like. Let us investigate them with regard to their true nature and character, and let us see how much of them has been carried into our schools, academies and colleges. If these people really tried to adapt the infant's way to an adult, they certainly made a mistake. It is impossible and ridiculous to clothe

full-grown people in children's dresses. But if we teachers of young people have indicated in our methods the ways of the old, we have made a still worse mistake, the ridiculousness of which is just as serious as that of the other side.

The Berlitz method is the most radical system of studying or acquiring a foreign language. This method is not new. The method of Comenius for teaching Latin was based upon the same principles, and the way which his pupils had to follow through the "*Orbis Pictus*" was the same road that is now followed by the Berlitz disciples. The main feature of this method is this, that the vernacular of the student is ignored altogether. Teachers and pupils, from the very first lessons, converse in the new tongue; they actually use the new idiom in and from the very first sentence. It is asserted that the instruction according to this method shall act as a substitute for traveling to and living in the foreign countries where the language to be acquired is spoken. While in recitation the student, like the tourist abroad, is to hear and to speak that idiom only which he wishes to learn. Therefore, no translation, no grammar, no rules, no books—at least not in the beginning of the course. The teacher uses objects within his reach, or pictures, and instead of translating he makes himself understood by pointing out and naming the objects in the new language. To give a simple example: The student does not learn: The window—*das fenster*, or in French: The table—*la table*. The teacher shows these objects directly; he points to them and says: *Das ist ein fenster*, or *c'est une table*; or else he may deem it sufficient to say: *Ein fenster*—*une table*. But he does not use one English word—neither for the purpose of translation nor mere explanation. There can be no doubt that this way is a good deal shorter than the old method of translating from the vernacular into the new idiom, and *vice versa*. A number of perceptions are at once formed in the mind of the student; these perceptions are brought into direct contact and connection with their objects. The danger of misunderstanding and misapplying the new terms seems impossible, the time which is needed by other methods for analyzing terms, phrases, and sentences into their linguistic elements may now be used for phonetic exercises and actual practice. And since every language represents its own and characteristic spirit, especially in its idiomatic terms and phrases, the old translation methods had to struggle with ever so many and sometimes insurmountable difficulties, simply because they rarely offered any encouragement for thinking or reasoning in the foreign language. The Berlitz method then goes further. According to the rule in mathematics, by means of two known quantities we can find the third or unknown, the method will explain that which cannot be

made clear through objects by analogy, by comparison, and by constant use of the words already acquired. The entire matter of teaching has been arranged in such a form that each lesson represents an interesting conversation between teacher and student. As a motto for this method, the well-known sentence of Luther has been chosen: "Anybody will learn German or any other language very much faster and better by direct oral conversation at home, in the market, or in church, than from books."

I have attended only a few recitations in a Berlitz school. My judgment on this method is based more on the books which I have examined than upon direct observation. Nevertheless, I am ready to say the following: The Berlitz method (and all its imitations or parallel methods—Henness, Sauveur, Gouin, Hausser, Worman, and many others—) will be in its proper place and will do much good, provided we are able to separate the student for a considerable amount of time from all people speaking his vernacular, even from his parents, brothers and sisters; provided, further, that, after having acquired a certain knowledge and skill in the new language, we can offer the student the association of people with whom he may converse in the language just acquired; provided, last but not least, that the teacher is a perfect master of the language to be studied. This last provision or condition sounds almost ridiculous, ironical, absurd. And yet it is stated in all sincerity. The Berlitz method requires not only a teacher of the foreign language, but a *foreign* teacher of the language, or, to express it more clearly; in order to learn French according to this method, the student must have a *French* teacher. This fact is freely admitted by all the promulgators of the method. In one of the catalogues of books intended for instruction in modern languages I find under the heading German Language (natural method) the following remark: In substance the book (Henness *Der neue Leitfaden*) is a classified list of words and phrases, generally woven into connected discourse. It gives the teacher all that is needful to teach according to this method, but he *must understand* German and *be able to speak* it; for *nobody can teach what he does not know*.

So far, so good, but does not this remark contain a more general truth? May it not be applied just as appropriately to any other method? Certainly it may; and yet it remains of special significance in regard to the natural method. Look—or better—listen to the pupils that have studied a modern language—German, for instance—after the Berlitz method. When, coming to our public schools, as some of them do every year, they talk the funniest German that you may hear. They have only vague ideas of German grammar, of construction, of synonymous terms. In most cases they are not able to

write a single German sentence without serious insults to grammar, and, with all their apparent parrot-like facility of talking, their vocabularies are small and infant-like. Though being adults or half-adults, they strut about in infant's dresses which show their pitiable nakedness all the more. Thus have they become the deplorable victims of a childish process applied to non-children, of an infant's method imposed upon adults or half-adult persons.

I will now proceed to the second group, the one which I above have called the literary or analytical method. The principal representatives of this method are Toussaint-Langenscheidt, Rosenthal and Schliemann. The first direct impulse was given by Jacotot. He taught Latin in the following way: His students had to learn by heart the works of a Latin author (Cæsar to begin with) chapter after chapter. As soon as the chapter was committed to memory a literal translation was given which was followed by colloquial exercises in Latin and on the subject matter of the chapter. Thus the student proceeded from chapter to chapter, and then from one work of the author to the next, and, finally, to another author. The principles of grammar, the elements of etymology, the rules of syntax, the signification of synonyms — all these things were developed directly or indirectly from the text, and always by strictly analytical method. Jacotot in the preface to one of his texts (Fénelon's "Télémaque," Books I. to VI.) says: "Whoever has committed to memory and fully comprehended *one* book will be able to understand all the others written by the same author. And this author will lead him to understand any author in the new tongue."

We find here the same principles, the same method, although somewhat advanced and improved, which were introduced and promulgated by Wolfgang Ratich almost three centuries ago. There is nothing new under the sun. Jacotot began with "Télémaque" or Cæsar, Ratich started with Terence. The method they followed was exactly the same. Committing the text to memory followed by colloquial exercises in the new tongue; analytical development of the grammar; overtaxing the memory, which was burdened with more than 90 per cent. of the entire study work; in fact, it was the old method which could be found in nearly all the monasteries and convent schools of the Middle Ages. And did not the students of those cloister schools actually acquire the faculty of talking the new language, in their case the Latin? Certainly they did, and later on they would talk their Latin more readily and fluently than the vernacular. The explanation is very simple. Their teachers, the monks, were speaking Latin only, their schools were internal institutions in the full sense of the word. Upon entering them, the students were entirely and

permanently separated from all former associations and brought into continuous contact with their tutors. Take any young person below fifteen or eighteen, separate him entirely and permanently from parents, brothers, sisters, friends, and all former acquaintances, take him into a family, boarding school or institution, or to any foreign country where he will no longer hear his vernacular—what will be the result? Within less than three months he will begin to talk in the new tongue, and within less than a year he will apparently master it. Such, and no other, was the secret of the success in the cloister schools of the Middle Ages.

The systems of these analytical literary methods have been developed to an astonishing degree. Above all stands the method, Toussaint-Langenscheidt. It claims to be scientific, and it is actually scientific. Rosenthal, in his "Meisterschaft" system, Schliemann, in his "New Method of Learning English," and Leipzig, published by Spindler, start from the practical standpoint; their texts are taken from daily life, and have the tendency of practical conversation. While Toussaint-Langenscheidt attaches the colloquial exercises to the classical text, Rosenthal changes, remodels, and imitates the model texts in all possible forms and ways; and while Toussaint-Langenscheidt bases all the work on a classical text (in the French course upon a novel by Chateaubriand, in the English upon one of Dickens' novels), Schliemann underlays the text of a novel which he himself wrote expressly for the course. But the leading principle, the fundamental idea, the course of study, and the final aim to be attained, remain the same with all. The method has found an innumerable host of disciples and imitators. It must be stated, however, that of the former only very few have completed the course. Paradoxical as it may sound, it is true after all: The greatest disadvantage of this method is its thoroughness. I myself have seen many starting upon Toussaint-Langenscheidt in good faith, and full of zeal and enthusiasm, but they soon grew tired, their strength and perseverance failed, and, quoting Schiller, I can say: *Noch Keinen sah ich frohlich enden*. I myself went through both the courses of Toussaint-Langenscheidt. The author prescribes a year and a half of work for each course, French or English, at two hours of study per day. With a fair school knowledge of French, and with from two to four hours per day, Sundays and holidays not excepted, I required almost four years to complete the course in French. I needed less time for the English course, because I was surrounded and assisted by English-speaking people, and was practically obliged to use the English idiom daily.

It must be emphasized once more that these methods are intended, if not for adults exclusively, still for pupils or persons of somewhat

advanced age and mature minds. For pupils of lower schools, of our public schools, and even the beginning grades of our high schools, the method is too broad, and resembles too wide and broad a road upon which children would very soon proceed in a zigzag line which, under the very best of conditions, would prolong their way to an almost indefinite length, or, under less favorable circumstances, might frequently carry them backward instead of forward. Still, there are some features of the literary and analytical method which ought to be considered thoughtfully by every teacher of modern languages.

The third group of methods is the one which aims to impart the new language in a merely colloquial way, without using objects, as we have seen with Berlitz and the natural methods, and without underlaying any connected text, as it is done by Jacotot and Toussaint-Langenscheidt. The teacher begins by giving simple phrases or sentences as models; a list of words—nouns or adjectives—is committed to memory, and then the real work for the pupil begins. The teacher asking questions in which he uses or imitates the model sentences obliges the pupil to do the same in his answers; the vocabulary previously memorized will be applied in ever so many new sentences which, however, like a never-resting teetotum, will turn again and again around one and the same spindle. This anxious clinch to the model sentence, together with the merely mechanical memorizing of words afterwards to be applied in a mechanical, tiresome, and sometimes idiotic way, burdens the method from the very beginning with the curse of monotony, dryness, ridiculousness, and even foolishness. Let us listen to some of Ollendorff's colloquial exercises: Have you seen the tailor? No, but I have seen the chimney sweeper. "Has the Turk a flower? No, but his daughter has an apple. Has the Spaniard the yellow hat of the German? No, but the Englishman has the red pants of the Frenchman.

This outrage of monotony and silliness is coupled with the still greater evil of burdening the memory with an endless line of disconnected words. The pupil takes his natural revenge for such an insult to nature; he forgets these words almost as rapidly as he learned them. I have tested many of my private students in regard to their vocabularies. Some of the young people had previously received instruction by the method Ollendorff. Their vocabularies were the most wretched. One student—a bright young man of eighteen—having completed twenty-two lessons in Ollendorff's course to learn English, did not remember 100 words. He had memorized about 500. Another student of mine, an intelligent young lady of about twenty, who had completed the Ollendorff course for English to learn German, was not able to read and understand simple, connected German, as

we may find it in any second or third reader of our common schools. Such is the curse of nonsensical memorizing, mechanical synthesis, and idiotic continuance of one and the same line or form. No more of these methods. They have no place within our schools. They would be sickening and fatal to our pupils, just as the monotonous and deafening noise of a machine will at length destroy the power of hearing.

Recapitulating the principal features of the different methods and pointing out those which indicate progress or improvement, we may say:

(a) There is a strong tendency in modern methods to emancipate the spoken language more and more from the written or printed language. A mere book, or literary knowledge of a modern tongue is not sufficient, and for most people even practically useless.

(b) The formerly so frequent vocabularies and merely synthetical exercises had to yield to phonetic studies. Some methods begin in a strictly oral way; they use no texts, no books. Only later, after having overcome the difficulties of pronunciation, the pupils will proceed to written or printed language.

(c) As to the latter—the printed text—the modern methods incline most decidedly to complete and connected language; that is to say, instead of individual, single and disconnected sentences, disconnected especially with regard to their meaning, the teacher and student will enter at once upon some complete composition of language, whether it be a shorter piece of reading, a short story, fable, or parable, or a longer and more extended work of some author—a novel, a romance, or a work of dramatic form.

(d) This text will then be studied analytically, and will be subsequently applied in a synthetic way. The student is introduced at once into the work and spirit of the author. He is directed to grasp the pronunciation, the form, and the spirit of the new language by one and the same process, through one and the same medium.

(e) The importance of grammar, sovereignly disregarded and even held in contempt by so many, is duly recognized by others. But the old mechanical and merely synthetic way of teaching grammar has been abandoned. Bayne says: "Grammar is a science or nothing." And as a science it must be taught. It is therefore based upon scientific, let me say classic, texts; it is developed scientifically from the language and will afterward serve as a scientific structure or framework for it. The knowledge of grammar may be dispensed with by anyone who will speak no other language but the vernacular. But it becomes indispensable for every person that aims at the correct use of a second language.

There may be some more features of our new methods worthy of consideration, or, at least, mention, but let those which I have stated be sufficient. Some of these points will pertain to our instruction. A deliberate and thorough discussion is indeed very desirable, although I wish to conclude my remarks with the warning: Let us be careful, cautious, and slow in adopting new ways. The Italian says very truly: *Chi va piano, va sano*.

DISCUSSION.

PROFESSOR HERMANN WOLDMANN, Supervisor of German instruction, Cleveland, Ohio, said that the methods employed depended upon the purpose for which the language is studied. A merely colloquial plan of instruction, he thought, would have a commercial value, to be sure, but, being solely a matter of memory, would afford little or no intellectual training.

In the more general discussion that ensued the following topics were touched upon: First, "Is it expedient for a teacher to correct a pupil's pronunciation or translation while he is reciting?" The concensus of opinion seems to be that it is better to wait until he has finished. It was suggested that the most glaring, and most habitual mistakes should be pointed out to the pupil as soon as he has finished; or that the class should be allowed to criticise his faulty pronunciation, and that the teacher should make only such corrections as the class had failed to see. The latter plan, it is believed, would insure attention and tend to develop a critical faculty.

Second, "How much attention should prose composition receive with beginners in modern languages in the high school course?" Professor Krug recommended that prose composition should be commenced as early as possible, but should be based on the subject matter read, and not be made too difficult, as this would only tend to discourage the pupil by putting unnecessary stumbling blocks in his way.

MISS ELIZABETH SCHUGENS, of the Buffalo High School, suggested that there be less prose composition, and more exact translation from German or French into English.

Third, "Should the Roman script be used exclusively instead of German in our schools?" It seemed to be the general impression that in short courses, requiring economy of time, the Roman script is sufficient, but that in fuller courses the German script ought not to be ignored. Moreover, the fact that several of our leading colleges require the German script was cited as an additional reason why we should be very careful in dispensing with it altogether.

Fourth, "In regard to methods of teaching the modern languages." Professor Krug, in response to questions asked by several members, remarked that he thought that no one method had yet been discovered which would satisfy all the requirements of our schools. "One of the great obstacles in the way," he said, "is the utter lack of uniformity in the curricula of our public high schools."

Fifth, "For what purpose do we study German and French in our secondary schools?" No definite conclusion could be reached on this subject. It was stated that one purpose was that of general culture, and another that of improving the pupil's English by insisting on accurate translations into his own vernacular.

A brief description of the modern-language work in England, corresponding to that of our secondary schools, went to show that accurate translations are required only of advanced pupils, while with beginners special stress is laid upon the language to be learned, and scarcely any upon the English.

The meeting was then adjourned *sine die*.

ROUND TABLE.

HISTORY.

The History Conference of the Secondary Department met in the parlors of the North Presbyterian Church on the afternoon of July 8th, but the very large number present compelled an adjournment to the vestry of a neighboring church. Dr. Ray Greene Huling, of the Cambridge, Mass., English High School, presided, and Mr. George Parker Winship, of Providence, R. I., acted as Secretary.

Dr. Huling called attention to the importance of definite aims as an element of success in the teaching of history, and suggested five results as eminently desirable in order that the subject may be a genuine means of culture to the pupil. These are:

1. A basis of historical facts, well selected, and believed to be true, should be laid in the memory and organized into a compact whole.
2. In the acquisition of these facts accurate and persistent mental habits should be formed, including, especially in the secondary period of education, habits of imagination and logical thought about historical data, but not omitting good habits of observation and memory within the same field.
3. Meanwhile the learner's moral emotions should be stimulated and his moral judgment trained by appeals based on the personal elements in his historical studies.
4. In the midst of this work the pupil must be trained to give as well as to get, to express in speech and in writing, with clearness and precision, both the facts he has learned and the inferences he draws from them.
5. In the prosecution of the foregoing aims, by skill and tact, there should be aroused and trained a keen and abiding interest in historical reading and research.

These results are not only desirable, but capable of attainment in the secondary school.

Dr. Huling then announced the three topics mentioned in the programme for this conference, College Admissions, Examinations in History, Library Method in History, and Helps to the Study of History; but he invited those present to speak upon any portion of the entire subject which claimed their interest.

DISCUSSION.

MR. WILSON FARRAND, of Newark Academy, Newark, N. J., opened the discussion upon the first topic by suggesting as the essential condition of all satisfactory college entrance examinations, that they should have as the primary object to insure the fitness of the pupil to go on with the college work, and to evidence his general development and the maturity of his mind. The requirement must be both serious and dignified, demanding earnest work in the schools and commanding the respect of both teachers and pupils. It must be so framed and administered as to supply a guide and a standard for the secondary school work. Most important of all, the college should allow all earnest, serious work done in the secondary schools to count for admission to college, so as to allow the smaller high schools and the non-preparatory schools to foster and develop the desire for a higher education. There ought also to be a substantial uniformity in the requirements of all the colleges so far as concerns specific subjects. The history work now done in the best schools is serious and earnest and it especially tends to secure the desirable maturity of mind and the development of power in the pupil. As an admission requirement its introduction is perfectly feasible if only the colleges will consent to the substitution of history for some other subject in case it proves to be too difficult in addition to existing requirements. The results agreed upon after a discussion of the proper subjects for preparatory history study at the Columbia College Conference have been set forth with much detail and authority in the May issue of the *Educational Review*. The further discussion tended towards a comparison of the methods of teaching history and the presentation of evidence as to the success of the library method. Many of the teachers had tried in one way or another to use the library method, with varying success, due perhaps in some cases to the teacher's preparation and enthusiasm. The most satisfactory results were reported from the State University at Lincoln, Neb., where the students under Messrs. W. E. G. Taylor and H. W. Caldwell have succeeded in producing for themselves historical narratives based upon the sources made available in the *American History Leaflets*, edited by Professors Hart and Channing, of Harvard, the *Old South Leaflets*, and the Sheldon-Barnes histories. The students are trained in all the stages of elementary historical research, including the comparison of their own results with those of the standard writers of derived history. Despite the doubting questions of many teachers, others declared their faith in the new ideas. Among those who appeared to have been the most successful in the use of the library method was Mrs. Jennie Ward Davis, of Corry, Pa., and Mrs. E. P. Wetmore, of Rochester, N. Y.

MISS TENNEY and MISS ELIZABETH HIRSCHFELD told of the work in the Buffalo High School, where, as in many other places, the greatest hindrance to the secondary work is found to be that the pupils coming from lower grades are unable to read intelligently, and they do not know what words mean, and do not distinguish the exact significance of what an author is saying.

MR. MYRON TRACY SCUDDER, Inspector of the University of the State of New York, detailed the results of his observations during his extensive visitations among New York schools, as a result of which he advocated more intelligent teaching in all grades. The wise use of a text-book seemed to him advisable

as presenting the matured opinion of some scholar who had spent years of research and of thought upon the subject of which he was writing. Other speakers found difficulty in agreeing upon the text-book to be prescribed which should meet these requirements.

The discussion was continued by Mr. E. E. Proper, of the St. Lawrence University, and Mr. Clarence A. Brodeur, of Chicopee, Mass., and was brought to a close by three short addresses.

PROFESSOR B. A. HINSDALE, of Ann Arbor, Mich., protested against the filling up of the mind of the child with words the content of which is wholly unknown to the child. Everywhere, in every subject, the competent teacher is everything.

PROFESSOR MORSE STEPHENS, of Cornell University, gave an English observer's impressions of the whole discussion, which seemed to him to bring out the enormous acquisitive power of the American child. The main fault in this as in every other line of American education, seems to be a prevailing desire to teach the children to run before they know how to walk properly. It is a very useful thing to learn a certain substantial body of facts, which forms a foundation for everything which comes after in education. From a school where there is a good teacher, the pupils who come to the colleges are apt to have a love of history and a knowledge of how to pursue their studies to advantage. Better no course in history than a bad course. The closing speaker was Inspector James L. Hughes, of Toronto, who urged the use of the topical method in secondary schools.

ROUND TABLE.

MATHEMATICS.

The Mathematical Section of the Department of Secondary Education of the National Educational Association, convened in Sunday-school room, North Presbyterian Church, 3 p. m., Wednesday, July 8th.

William A. Greeson, Dean of Lewis Institute, Chicago, presided.

S. Weimer, of the Cleveland Central High School, was chosen Secretary.

James L. Patterson, Union College, Schenectady, read the following paper:

ECONOMY IN MATHEMATICAL INSTRUCTION.

BY PROFESSOR JAMES L. PATTERSON, UNION COLLEGE,
SCHENECTADY, N. Y.

The spirit of this age is iconoclastic. Tradition has lost its power. The fact that a thing has been for years past has little weight in determining whether it shall be in years to come. The utilitarian and disciplinary value of each branch of study in our institutions of learning is under scrutiny as never before, and time-honored beliefs are ruthlessly set aside. The field of knowledge is widening daily, new studies are clamoring for recognition, and as the capacity of the human mind is limited, the battle grows hot as to what shall be allowed to go by default, what retained, what added. The attempt

to adjust our schedules to the new requirements without sacrificing too far the old has resulted in a congestion which too often sacrifices thoroughness for quantity, and substitutes a thin veneer for solid culture.

The smoke of this conflict has obscured to some extent our vision of ways by which we may escape from some of the evils from which we suffer. No reformer, however exuberant his fancy, or violent his prejudice, has proposed the elimination of the elementary branches of mathematics from our curricula, and it is not likely that such a proposition would find advocates; for although a limited amount of arithmetical study would suffice for the absolute material needs of the great majority of mankind, yet that wider knowledge of number and form which is the necessary foundation of any adequate conception of the universe in which we live, and the prerequisite of all scientific studies, requires the prolonged and thorough study of at least the elements of algebra and geometry. While it is true that the place of mathematics in our educational system is assured, yet it would be folly indeed for us to be blind to the fact that a wise economy of time and effort in mathematical instruction is demanded by this age. If there are wastes in subjects taught or in methods employed, justice to other branches of knowledge, as well as to the individual student, demands that those who stand before the people as leaders should be untiring in their efforts to bring about reform. In recent years this subject has received much attention, and discussion has borne fruit in many of our best institutions. But in spite of all that has been said, and notwithstanding the growing conviction that in proportion to the amount of time and attention that mathematical studies receive, the results are lamentably unsatisfactory, yet careful investigation reveals almost no effort to take away the reproach in the great majority of our schools.

In what I shall have to say on this subject there may be little that is new, but that which is old can never become uninteresting to earnest teachers as long as there is overwhelming evidence that it should be repeated because it has not been heeded.

In this paper I shall confine myself to two or three phases of the question, illustrating different directions along which economy may be secured.

It has been said by competent authorities that the average pupil of fifteen years of age knows less about arithmetic than he should know at thirteen. Judging from a wide experience with boys from our public and private schools, I have no doubt that the statement is correct. This waste of a considerable part of the time spent in arithmetical study is still found in most of our schools, notwithstand-

ing all that has been recently said about it. The changes demanded by modern conditions are:

1. More thorough drill in the fundamental rules.
2. The omission of certain topics.
3. The simplification of the treatment of other topics.
4. The postponement of commercial arithmetic until the pupil is old enough to comprehend it.

Facility and accuracy in the fundamental operations is secured only by practice. This practice should be continued throughout the arithmetical course, and may well occupy a portion of almost every recitation period. It is impossible for an instructor to supervise the tablet or blackboard work of each pupil, and thus make the solution of every problem an exercise in rapid computation, hence it is essential that a special exercise for this purpose should be frequently given. If any teacher supposes that his class is proficient in multiplication, let him give out a problem in this operation, each factor having three or four figures, and call in the papers after a reasonable time and note the result. By the way, how many boys and girls know by experience that the best way of testing the result in multiplication is by casting out the nines? This thorough training in computation will bear fruit all along the mathematical course and in after life. It will save time in the long run a thousand fold.

Among the topics which may be omitted are cube root, equation of payments, and compound proportion. The last mentioned topic has not even a shadow of an excuse for retention. Ordinary analysis, or the so-called unitary method, will solve every problem given under compound proportion, and no special method is necessary nor desirable either for the sake of utility or discipline.

The simplification of the treatment of compound numbers is perhaps the greatest need of today in arithmetical instruction. This subject as presented in the great majority of our text books in use, and as taught in most of our schools is one of the most formidable as regards the time required and the difficulties encountered. It is supposed to be a practical topic, but when any mature person compares the actual needs and practice of daily life with the treatment of this topic in the schools, the latter seems grotesquely unpractical and magnified into proportions most absurd. The fact is that compound numbers of more than two or three places are almost unknown even in engineering. The following problem would not attract special attention in any arithmetic: Reduce 10A. 100 sq. rds. 5 sq. yds. 6 sq. ft. 30 sq. in. to decimal acres, and yet it will serve to illustrate one of the most common absurdities of our texts. A land surveyor employs two very crude instruments the magnetic needle and the chain. He may be

able to obtain the area of a field or farm within a few square rods, but what of the yards, what of the feet, what of the inches? A compound number containing acres and square rods is common enough in practice, so square feet and square inches may go together, but hardly ever the whole series. The height of absurdity is reached when the pupil is required to add, subtract, multiply, and divide these long numbers. I believe that it is quite within bounds to say that the time devoted to this topic in the schools of this Empire state today might be reduced one-half to the advantage of all concerned. All that is required is the thorough memorizing of the tables in present use with practice in easy, chiefly oral problems.

The adoption of the metric system would, after a few years of confusion, be a happy solution of the question we are considering. What more fitting gift could the nineteenth present to the twentieth century than such a boon to the commercial and educational worlds? While we work and wait for such a consummation, let us make the best of existing conditions.

Time will not permit me to refer to other topics in detail, but every competent teacher, by the exercise of common sense and independence of traditions and text-books, will be able to reduce to the needs of actual life and future mathematical study, many topics which are now treated from a purely theoretical standpoint, a treatment which had its origin years ago, before algebra and geometry with their superior disciplinary powers were found in the courses of study for the masses.

The elements of percentage and interest may be understood by the pupil of twelve or thirteen, and may be thoroughly taught, but most of the commercial applications, such as bank discount, commission, insurance, taxes, duties, stocks and bonds, and the more important business forms with which every young person should be familiar, are beyond the comprehension of the pupil of this age, and I should strongly urge that their consideration be postponed to the final year of the high or secondary school course, when one or two hours per week for a short term would be sufficient for their mastery.

It is not my purpose to speak at length of algebra, but I wish to make a suggestion to teachers of mathematics in the fitting schools. It is not uncommon to find students in college who have no difficulty in comprehending the analytic geometry and calculus, yet lack a working knowledge of fractional exponents, surds, and quadratic equations. They may have no difficulty in differentiating a somewhat complex radical form, but the reduction to a simple form gives trouble. In analytic geometry and in the theory of equations we meet students constantly who have not mastered quadratics. No student should

be passed in this subject in the fitting school who is not perfectly at home in the solution of equations by factoring, and in the solution of quadratics by the formula resulting from the solution of the general quadratic $ax^2+bx+c=0$, and the condition for equal roots is of prime importance.

As to the forms $ax^2+bx=c$, and $x^2+px=q$, which are found in so many American text books, I should enter a very emphatic protest. The form ax^2+bx+c , is *the* form of the quadratic quantic. It is, in my judgment, the best form for elementary work, it is the only form for advanced work until we require the binomial form in the higher equation theory. The solution of quadratics by completing the square is only a beginner's method, and it seems to me that it is a waste of time to learn more than one method of completing the square. Let me repeat, quadratics should be solved by factoring if the factors are readily determined, otherwise by the formula $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$. Determining roots by inspection and by trials are also profitable exercises. My suggestion then is that in teaching elementary algebra the future needs of the pupil be constantly kept in mind, so that in advanced work time may not be spent in doing what the fitting school should have done, or in undoing what the fitting school has done badly.

Leaving now this simple phase of our subject, let us consider what method of presenting mathematical subjects to our classes will most efficiently and economically minister to the development of a well-trained mind. It is common criticism that the study of mathematics does not fit a person for the practical duties of life, because in mathematics the data are definite, and a logical claim of reasoning conducts from premise to conclusion, and no exceptions are found; while in actual life the data are seldom definite, many modifying influences must be considered, and a judgment reached by a nice balancing of probabilities. The person who reasons in this way has but little conception of the modern theory of mathematical instruction as it is understood and practiced by our best teachers. In the hands of these teachers mathematics *does* present facts which are useful, it *does* cultivate concentration, it *does* train the mind in exact demonstration and logical proof, but it also cultivates the power to examine a question from various standpoints, to take into consideration various modifying conditions, to choose the most simple and direct from a variety of methods, and thus it does fit one for solving the problems of life. But how shall this result be accomplished? It cannot be reached at all, or only by an enormous waste of time, by attempting to compel the student to reproduce the demonstrations and solutions of the text-book, which is at best little more than an exercise of the memory. A

few useful facts may be learned in this way, but that is all. The reasoning powers are not developed, the judgment is not exercised, and self-reliance is not inculcated. Such methods do not fit our youth for the battle of life, and time thus spent is largely wasted. And yet the text-book has its place, and its use does not necessarily lead to intellectual imbecility. But its office is not to tell the student that which he may find out for himself, nor to relieve the teacher from the duty of directing the investigations of the student. Its office is to present a systematic development of the subject for reference and review, and to furnish in a convenient form problems from which the teacher may make a suitable selection for each pupil to solve. We may lay down this principle as fundamental: New topics should be introduced through the medium of the class-room rather than the study hour. In other words each new topic should be discussed in the class-room before it is made the subject of private text-book study by the pupil. Upon the nature of this discussion the whole question hinges, and here the true teacher is revealed. College professors who teach the required subjects of the college course frequently lecture before the class, explaining each point and illustrating every principle by working out examples. The day following the student is expected to answer the questions which the professor had answered the day before, and which are also answered in the text-book, and to work out problems like those solved by the instructor at the previous recitation, and I regret to say that not a few secondary teachers follow this bad example. When this method is compared with that which consists in assigning a lesson in the text-book, and hearing the student recite on it the following day, the latter method becomes quite respectable. A student may get some valuable training from his study of the text, but in elementary work the lecture method has scarcely a redeeming feature, except that it matters little whether a class numbers twenty or 200. Handling large classes is a kind of economy, but not *the* kind that this paper advocates.

In the discussion which introduces a topic to a class the attempt should be made to connect it in a simple and natural way with something that has gone before, either in the class-room or in the experience of the pupil. The youngest child of school age knows what one-half or one-third of an apple is, as a matter of experience. Such elementary knowledge may be made the basis of a development of the subject of fractions in which the chief agents are an interested child, a few apples, a knife, and a teacher who knows when to keep silent. It is an educational crime to tell a boy or girl why $\frac{2}{4} = \frac{1}{2}$ or $2\frac{1}{2} = \frac{5}{2}$. When difficult topics are introduced the teacher will find it necessary to ask leading questions, or at times to answer a question outright.

So much has been said recently in regard to the application of the method outlined here (which has been called the laboratory method) in elementary geometry, that I need not enlarge upon the subject here. It may not be amiss, however, to remark that many teachers who do not feel competent to conduct the work without a text-book, or who are laboring under unfavorable conditions, are obtaining excellent results with the more earnest students in their classes, while the indolent and indifferent are compelled to con the text as of yore. But in the ideal method no text-book is used.

In the required work in college the same method may be employed with still greater efficiency than in the more elementary subjects.

If an instructor is thoroughly imbued with the spirit of this method, whether in school or college, whether classes are large or small, he will find the opportunity to put it to a test to the delight and profit of the earnest workers in every class.

In the application of this method the time spent with the teacher is all important. In the lower grades long study hours are practically wasted. During the last year or two of the secondary course, the quiet study hour becomes of greater relative value. In many of our secondary programmes the recitation time allowed to plane geometry is not sufficient for the best development of the pupil. It is not a wise economy to curtail here. A four-year programme for secondary schools based upon the supposition that elementary algebra and geometry require the same relative proportion of study and recitation periods as solid geometry and trigonometry is, in my judgment, a mistake. If time must be taken from mathematics and given to music and drawing and science, let it be taken from the study and not from the recitation periods.

We do not claim for this method a saving of recitation time, but there is a decided economy in the study period. And, more important still, while under the old system the study hour is often a period of blind groping and discouraging failure, resulting in disgust for study and in dawdling habits, under the new method this period becomes full of interest and intelligent effort, because of the previous discussion in the class-room.

But the strongest argument for this method is that it teaches the pupil how to think, it trains the reasoning powers, it exercises the judgment, it cultivates self-reliance, and gives the pupil command of his faculties. And all this is accomplished with that interest and sense of growing power which are essential to the best education.

DISCUSSION.

Topics grouped under the following heads were discussed: (1) Arithmetic in secondary schools; can it be dispensed with? If not, how much time should be given to it and in what year? (2) In what order should the subjects in algebra be introduced? (3) When and how should negative exponents be taught to beginners in algebra? (4) The treatment of factoring so as to include the solution of equations. (5) Should algebra and geometry be taught contemporaneously or consecutively? or, in general, what is the best arrangement of a course in algebra and geometry? (6) Should solid geometry be included in the courses leading to college?

On motion of Mr. Morton Jones, of Memphis, Tenn., the discussion was limited to five minutes each. Mr. Jones then opened the discussion on arithmetic in the high-school course, arguing that more attention should be given to the subject of aliquot parts.

MR. A. H. AVERY, of South Dakota, contended that all problems in arithmetic should first be solved mentally.

DR. FREDERICK MONTESER, of the School of Pedagogy, New York City, thought that teachers have a false idea of utility. He objected to the emphasis placed upon rapid addition, for instance. Common schools have no business to educate specialists; should simply develop the mind. He would have arithmetic in the high school, but would show its relation to other branches of mathematical study.

PROFESSOR W. A. SHOEMAKER, of State Normal School, St. Cloud, Minn., disapproved of the idea that number or arithmetic should precede geometrical concepts. Pupils should be early introduced to geometrical form, as the idea of number can thus be better understood through form.

CHARLES J. CAPEN, of Boston Latin School, argued that objective geometry should be first introduced to the children. The speaker asked for information concerning a text-book for such instruction. He would like to see such a book written. The speaker outlined the plan of work in vogue in the Boston Latin School whereby the subject of geometry is presented in this way.

MR. E. C. LAVERS, of Easton, Pa., thought children were not mature enough before they reached the high school to understand fully some branches of arithmetic. He was of the opinion that some of the subjects of arithmetic should not be studied until the pupil has had both algebra and geometry. The arithmetic should not be completed until the fourth year of the high school.

MR. SHILLER, of Michigan, would like to get an expression of the teachers on the question of cutting down the work in arithmetic in the seventh and eighth grades, and of introducing algebra and objective geometry. In his school they have arithmetic in the high-school course, and algebra in the eighth grade of the grammar school. In response to the question it was discovered that twenty schools were here represented in which arithmetic was taught in the first year of the high school, twenty-four schools in which arithmetic was taught in the last year of the high-school course, and twelve schools in which it was taught both in the first and fourth years of the high-school course. In seventeen schools no arithmetic was taught as a special study in the high schools.

MR. EDGAR H. NICHOLS, of Cambridge, Mass., thought the meeting should come to some practical conclusion and suggested the following motion: That it is the sense of this meeting that, in teaching arithmetic in the grammar schools only the five fundamental subjects of addition, subtraction, multiplication, and division of whole numbers, and simple fractions, and decimals, should be taught before the subjects of elementary algebra and objective geometry should be taken up.

In discussing the subject of negative exponents, Mr. Nichols expressed the opinion that complicated problems involving negative exponents, should be left out of an elementary course in algebra; that the pupil should be taught that the negative exponent is simply another way of indicating division, for instance that $3a^{-2}$ should be read "divide 3 by a^2 ." Negative exponents should be avoided in practice almost wholly, because unnecessary.

MR. E. C. LAVERS.—The presentation of mathematical subjects should first be inductive, and further on, when the logical faculty is developed more fully, deductive methods should be followed, so demonstrative geometry should come later in the course. He was of the opinion that since President Eliot has enriched the grammar-school course the teachers and pupils are taxed beyond mortal endurance. Too much attention was given to the few pupils who go from the high school to higher institutions of learning, and not enough to the many who find in the high schools their finishing school.

MR. BOWEN, of Kansas.—In his state the high schools followed a plan by which the subjects of geometry and algebra were alternated, taking a half-year in each for the first two years. But the plan did not prove a success and was abandoned.

MR. JAMES L. PATTERSON thought the University of Chicago had the right plan, in which a lesson was given every day in geometry until the subject was completed. Algebra was taken up in a similar manner.

MR. MORRIS, of Wisconsin, asked what was meant by literal work in arithmetic to which Professor Patterson responded that arithmetic and algebra are one, and the pupil should early be taught to use symbols and to generalize.

MR. LAVERS thought it unwise to attempt to teach generalization too soon before the children were able to follow such lines of thought.

PRINCIPALS' ROUND TABLE.

The Round Table convened Wednesday afternoon, July 8th, 2:30 p. m., with Principal F. L. Bliss, High School, Detroit, Mich., in the chair.

G. F. Jewett, Youngstown, Ohio, was to have opened the discussion of the topic, "To What Extent Should Promotions be Allowed in One Department with Failures in Another?" In Mr. Jewett's absence the chairman announced as the topic, "What Should be Done to Supervise the Work of Individual Students in a Large High School?" He furthermore expressed a desire that the gathering might take the character of an experience meeting, and that the discussion might be as free and informal as possible. The expectation of those present to hear the former subject discussed shaped to some extent the character of the remarks made. The discussion was led by Principal William H. Smiley, High School District No. One, Denver, Colo.

MR. SMILEY.—There is no need to speak at length of the importance of this question. The claims of the students to individual attention in every grade from the kindergarten to the college have received such full discussion during the past two or three years that we probably meet this afternoon more sensitive to our duty to him than we have ever been. Our chairman has asked that we speak from personal experience and I shall heed this suggestion, speaking for a school with an enrollment of nearly 800 boys and girls.

A principal feels at times with tremendous force his lack of personal acquaintance with those under his charge, but he probably never feels it so keenly as when he stands face to face with the members of his entering class. Then, of all times, he longs for omniscience; yet, at this time, when fullness of knowledge would avail him so much in giving guidance and counsel, is his knowledge scantiest. If wise, however, with all the administrative ability he may possess, he plans to make good the deficiency he feels so keenly.

In our school district, the relation between the high schools and the grammar schools is close and confidential. Superintendent Gove, the twelve or more principals of the grades below the high school, and the principals of the two high schools, meet in conference on questions of mutual interest once in two weeks throughout the year. I know the teachers from whom my students come, promoted to the high school on the certificate of their principal. For several years the principals have furnished me a more or less detailed account, made out either by the principal himself or by his eighth-grade teachers, of each pupil entering the high school. These reports give reasonably full account of the strength and weakness of the individual, of marked capacity or incapacity in special subjects, as shown by his previous school history, sometimes something of his home surroundings, and now and then something of the influences affecting him outside of home and school. This may seem at first to be a little inquisitorial, but whether it be so or not depends on the use made of the information. Suffice to say that such information has often proven of inestimable value, making possible a reasonable explanation of extraordinary conduct of a student in his new surroundings; his act, against this clear background of his past, appearing much oftener to his advantage than to his disadvantage. In no case is a student's high school future made for him by his past record.

That each student may be brought into close personal relationship with some

one teacher of the corps, our sixteen schoolrooms, each seating about forty-five pupils, with the exception of the senior class-room, which seats one hundred, are assigned to individual teachers and are known as their rooms. The teacher, so far as the programme makes it possible, instructs the pupils assigned to his room in some one subject in order to facilitate his acquaintance with them. He is expected to know them intimately. He has personal oversight of their monthly records in scholarship in all studies and in deportment, and gives reproof or praise as he may think wise. He prods the lazy, gives encouragement to the slow, holds in check the too ambitious, and tries to secure willing loyalty to necessary school requirements. In short, he makes his own character count for all it may by close contact with his little group, and he is able to give exact information to principal and teacher if need arises. He calls them to order at the opening of the session, and dismisses them before the lunch hour and at night. He is required to be in his room twenty minutes before school opens; he often remains after school hours to give suggestions or help to those who may desire it. One morning in the week he uses as he sees fit the time devoted on other mornings to opening exercises in which the whole school unites. How the time is used depends on the personality of the teacher and his own interests. He may desire it for the discussion of some current topic to which he has invited individual students to contribute; in the main he strives to so use this time as to get in touch with his pupils on a common footing of mutual interest in subjects that lie outside the ordinary school routine, that both may feel at one in a society more comprehensive than the school.

That I may be able at a moment's notice to turn to the record of any pupil, I have printed slips for all, arranged by rooms in alphabetical order, and kept in a drawer of my office desk. On these the teachers enter at the close of each school month a pupil's standing in each study, his absence, his tardiness, and his deportment. At one end of the slip is space for any notes I may desire to make of interviews with him, or with his home. The monthly reports sent to parents are copied by the room teachers from these office slips. I find them of great assistance in fixing the names of the entering class. I take the slips of a room to any class I may desire to visit, and as the teacher calls upon pupils I turn to the corresponding slip, making any mental note for purposes of association that I may please, and I find in a few weeks I have fixed firmly the names of a large proportion of the class. No amount of time spent in learning to call a pupil by his name can be wasted. He often assumes that your knowledge extends much farther than it does. But this assumption on his part at times solves great difficulties for you.

Perhaps the most valuable result of our weekly teacher's meeting is the discovery of those neglecting work in several subjects, or making petty trouble for several teachers. Prompt reference of the matter to the home usually brings prompt improvement. We hear frequent charges against the home, but my experience in securing helpful co-operation when a business-like statement of facts is courteously presented discredits the stock assertion about its lack of interest. The home often apologizes for its lack of power, but I have never found it unwilling to apply all that it possessed.

But I believe the principal's power for personal supervision is rendered vastly more efficient if it be possible for him to meet his school in one body. A few words in the assembly-room may strike home with telling effect. The mass approves them and shows that it approves them. The sentiment of the mass sweeps the individual before it. Words that, coming from the principal, merely

as principal, would hardly reach the individual to whom they apply, when backed by the forceful silence of school approval sometimes carry instant conviction to individual hearts. In the assembly-room the brain and heart, the thought and feeling of various school years, various classes, various social surrounding are co-ordinated and unified in the public opinion of school society. By earnest effort on the part of the corps of teachers, working through the natural student leaders of school society, this opinion may be made very high. The highest ideal we teachers need have is that this school opinion may unite in support of our ideals of character and scholarship. There is no supervision that equals this in its power with individuals.

PRINCIPAL O. D. ROBINSON, High School, Albany, N. Y.—The difficulties arising from the necessity of supervision, I suspect, are very general in their character, and the remedies for them must be pretty much the same the country over. Our school is organized so far as possible on the department plan. Teachers are obliged to have some charge of study halls in addition to their regular hours of teaching. Our study halls seat about 120 pupils, and questions affecting individual deficiencies are raised in our teachers' meetings in much the same way as described by Mr. Smiley. We have, however, a printed form for convenience in calling promptly to the attention of parents any and all delinquencies. I find parents pretty uniformly desirous that their children use all diligence about their work, and I frequently get great assistance. If I find that a parent takes a great interest, then I say to him, "If you desire, your son may bring you a weekly report of his work." The result usually is that I get prompt support from the home. Let me say right here that I always communicate with the father at his place of business, rather than with the mother. But my most troublesome case is that of the pupil who dangles along for several months till he is hopelessly behind. Then what can be done with him? My way of settling such a case is to have him drop one or two studies, that he may save himself in others. This of course burdens him with conditions which must be made up before graduation. Though we lay much stress on the notion of graduation, yet, after all, this is not the most important consideration for the boy. If I can get him to work in any one subject, I make a better man of him. If I can keep him at work for a year or two I do my duty by him, though he may not graduate. I would not keep him back for failure in a single study.

PRINCIPAL EDWARD L. HARRIS, Central High School, Cleveland, Ohio.—I need to preface what I may say by the statement that I am obliged to carry on what might be termed a double-headed high school, or two high schools of 800 pupils each, conducted for five hours in successive sessions. The difficulties of supervision are of course doubled, but we have succeeded in securing a regulation from the Board of Education that relieves us a good deal. We now have the power to send back to the grammar school any pupil who, after reasonable trial, is found to be unable to carry the work of the high school. But in spite of its exercise we still had failures, especially in mathematics and language. So we tried a plan which in mathematics has worked excellently, but in language not so well. I formed extra classes for those failing and put them back at the beginning, and in this way saved about 40 per cent. of those who otherwise would have been absolute failures.

PRINCIPAL ROBINSON.—When you exercise the authority of returning pupils to the grammar school, do you not in reality drive them out of school? I would also like to raise the question as to whether many high schools are in a position to secure extra teachers for such ideal classes as Principal Harris describes.

PRINCIPAL HARRIS.—About one-half of those sent back continued in school. Arrangement was carefully made that they might repeat their work in other grammar schools than those originally attended.

PRINCIPAL ALLEN, Rochester, N. Y.—We have tried this plan of returning pupils to the grammar grade, and, so far as my experience goes, the method is a failure, for when you say "Go back," you may as well say, "Out of school!" But our trouble is not simply in the first year, it recurs in the second, the third, the fourth. We have, however, made the rule that no pupil may enter the graduating class with conditions hanging over him. But our governing principle is to give a student such work as he has capacity to do, for such time as he may stay.

FRANK D. BOYNTON, High School, Ithaca, N. Y.—I would like to ask Mr. Allen with regard to pupils allowed to pass along from one grade to the next, if he would make any difference in the matter of succession of studies. For example, could a pupil who had not completed algebra in the first year continue geometry in the second? If his father should make such a request would it be granted?

MR. ALLEN.—We should allow him to go on with geometry.

MR. ROBINSON.—Our practice would agree with Mr. Allen's.

MR. BOYNTON.—Suppose the father should say, "I wish my boy to study algebra, but not Latin." Could that also be granted?

MR. ROBINSON.—The case is a rare one; but I presume I should say "Yes." I never make any quarrel with the home over questions of this sort. After a boy has proven his incapacity in one line, I say, "Go on in other things." If the parent insists, I believe the courts have decided that he has a right to any instruction the school offers, so far as it can be given without impairing the efficiency of the school, and without detriment to the other students.

PRINCIPAL JOHN MICKLEBOROUGH, Boys' High School, Brooklyn, N. Y.—With us a boy must attain an average of 70 per cent in each study before advancing to the next grade. I ought to state, however, that we have a system of semi-annual promotions, so that a boy is not seriously injured by being obliged to repeat five months' work. I sincerely believe that the high school is for the boy, and that our chief duty lies in seeing that he gets all he possibly can out of it, and that no mechanism of our devising should work to his injury. I have a school of 1,000 boys, and my method of dealing with lapses from duty is this: When a boy is reported by a teacher as delinquent in work, I at once send my stenographer about to all his teachers, and the matter thus obtained I make the basis of a full statement to the boy's father. In conclusion I say to him, "Your son's education is a most important part of your life work. Your support is desired now." I find no refusal of co-operation to appeals made on this basis. The plan suggested by the first speaker, of securing statements from former teachers would avail me little. My boys come from too varied sources, I have little knowledge of their teachers, and in any case I prefer to let the boys write their own high-school records on clean sheets.

PRINCIPAL J. REMSEN BISHOP, Walnut Hills High School, Cincinnati, Ohio.—Our system is a rigid one in the matter of promotions. Yet I believe with previous speakers that too great regard for mechanical requirements ought not to be allowed to work injury to the individual. It is our duty to see that the individual

gets all the good that the school can yield him. We do not, however, promote from a grade till all the studies of that grade are completed. We consequently find that in most cases conditions are made up during the summer. We have another provision which we have found helpful, namely, that a student making less than 50 per cent in a study must repeat the study. We are enabled without difficulty to have pupils repeat studies because the school is large; there are many divisions, and therefore this work of conditional pupils may be made to fit in without detriment to the regular work. To spur on delinquents from month to month, I have what I call a delinquent register; I take it about to each teacher at the end of each school month, on the Friday preceding the monthly payday, that accounts of pupils and teachers may be squared at the same time, and get the names of all pupils falling below 70 per cent. Then I sit down and with a blank provided for the purpose send this record of failure to the father's business address.

PRINCIPAL CHARLES C. RAMSAY, B. M. C., Durfee High School, Fall River, Mass.—We offer five courses of study each of four years; we also have a general course made up largely of electives. We have two kinds of pupils, most of them regular, a few irregular, or, as we prefer to call them, unclassified. Pupils may become unclassified on grounds of health, or because engaged in work afternoons and evenings. There are very few of this class, perhaps twenty-five in a school numbering 575. All others are required to have sixteen prepared hours of work each week. For promotion, our standing requires an average of 70 per cent.; a student may fall as low as 30 or 40 per cent in a study, if he can do well enough in other studies to bring his average to 70 per cent. This year fifty-three failed to get the required average, but on vote of the faculty twenty-three were promoted conditionally; thirty failed to pass.

PRINCIPAL O. S. WESTCOTT, North Division High School, Chicago, Ill.—Do I understand correctly that a student can pass in a study on an average of 30 or 40 per cent?

PRINCIPAL RAMSAY.—Such is the case. We have a blank for communication with the home, and this is furnished to teachers, who may send it to the home on receiving the principal's approval. We make but two regular reports, at the mid-year, and in June. We, however, give the whole school a rating at the end of five weeks, at which time pupils may be sent back, another rating at the end of ten weeks, and also at twenty. A pupil is not allowed to enter the senior class until all conditions have been removed. I desire to speak for a moment of the matter of supervision of study periods. No work of the student is more important than this, and I attach the greatest importance to the conditions under which it is done. I would have the room carpeted that there may be absolute quiet; I would have its walls suggest its purpose by their decorations. Its pictures, its statues, should recall much that is notable in the history and literature of past and present. Its order should be absolute, and the spirit of the place should be such as to secure willing obedience to this requirement. If we return to the old-fashioned custom of two sessions, there will be even greater need of attention to this portion of school work. I shall not like the change, but the rather lax control of parents over students, and other unfortunate conditions of the present, seem to make such a return a necessity.

PRINCIPAL EDGAR F. DOWNS, High School, District 17, Denver, Colo.—We are fortunate in having secured a room very much of the character described by Prin-

Principal Ramsay. We provide for careful, helpful supervision, even to late hours of the afternoon. Our reference library is here, and students receive methodical instruction in its use. In the matter of individual supervision, so far as this side of the work is concerned, we believe we are in a fortunate situation. We use words rather than percentages for classifying pupils, and at the end of the first four weeks, pupils are recorded as excellent, good, fair, poor; we have no regular time for sending reports to the home, believing that the element of surprise in receiving an unexpected report is not without its value.

PRINCIPAL H. H. HOLMES, Moberly, Mo.—A point that does not seem to me to have been sufficiently emphasized in this discussion is the extent to which the grading of pupils depends upon the grader. A most important part of a principal's work is to discover the personal equation of his teachers in the matter of grading above or below a given standard. A point I would make about the care of a study-room is this, that it should be supervised by one having nothing else to do. There is no more important work than this done by the school, and it should be done by the strongest teachers and those who will do it with understanding and faithfulness. As regards promotions, I do not believe they should be made so long as a student is delinquent in a single study. No matter if he be delinquent in but a single study, let him sit in the lower grade; promote him and he will be careless about the old study. There are serious objections to grading students by the words, fair, excellent, and so forth. In spite of you they will resolve the words into percentages for their own purposes; it is just as well to let them have their full record. Again, the word fair might apply to one pupil who is promoted, and to another who is not promoted; it therefore seems to me that there are as great objections, in the matter of fine distinctions to the use of words as to the use of figures.

A. R. HARDISTON, Hobart, Ind.—The marking system often does great injustice to students, through failure to make a proper discount for absences. In some schools a student who is present but a single day, and makes a perfect recitation, receives 100 as his average for the month, though absent the other nineteen days, whereas his proper mark is but 5 per cent, till the work of the nineteen days has been properly made up. Mention has been made of the possibility of making up conditions by work during the summer. In the main I believe that such work is poorly done, and I should not encourage it.

PRINCIPAL O. S. WESTCOTT.—The difficulty suggested as to doubtful meaning of words used in expressing grades could not arise under the Chicago system. But in case of a pupil's falling below 75, his exact standings are sent to his parents. There can be no dispute as to the usual character of summer work; yet, for a few, a good stiff examination in the September following his failure will undoubtedly prove most excellent discipline. There are conditioned pupils, however, whom it would be criminal to urge to make summer reviews—pupils who should not be allowed to study during the summer. I endorse heartily the words of the last speaker, and the point that was made with reference to classifying pupils in former grades till work of grade be finished. I am, however, compelled, because of the crowded condition of our school, to grade up into higher rooms such as have completed majority of their work. I should be glad to enforce the rule that no pupil may enter the senior class conditioned. But with us students are usually mature, and able and willing to put forth great effort to finish back work. This year in a graduating class numbering ninety-two there was not a single failure.

A. L. BEECHER, Van Buren, Ark.—It appears from the discussion that some of these questions are affected by the practice of holding one session or two. I would like to ask how many present favor the double session for high schools in cities of 50,000 population. There appears to be none. How many favor it for cities of 20,000? (The vote as announced by Chairman Bliss stood thirteen in favor of a single session; twenty-three in favor of a double session.)

SUPERINTENDENT FREEMAN, Aurora, Ill.—I should like to hear from some who have tried the single session and are dissatisfied with the results.

MR. MADEGOOD.—We returned to the plan of double sessions because we thought it better to have students in school in the afternoon than on the street. We secured better work by so doing.

PRINCIPAL SUMNER A. FARNSWORTH, Cleveland High School, St. Paul, Minn.—It takes some time to educate students to business-like habits of planning their work under a single-session plan; when that time comes there is no further trouble. I wish to return for a moment to the discussion of the question of promotions. We have weekly records open to inspection of the principal, and we send monthly reports to parents, using the word system, excellent, good, fair, poor. We place no figures in the record book. Those receiving mark of excellent and good in their general record for the year are promoted, all others have to sustain an examination. "Fair" indicates that a student has passed in three subjects and must repeat the subject in which he has failed. I do not send pupils back to the grammar grade, for I have the promotion to the high school in my own hands.

PRINCIPAL IDA HASLUP, High School, South Pueblo, Colo.—We have two sessions and insist that all work shall be done at school. Our work, as most of you are aware, is done on the individual plan. If a student wishes to prepare work at home, he receives from me permission as to the amount of work I may think wise for him to do. To save failure, the entering year in the high school, we have what we call a preparatory class. Those coming to us are classified as strong and weak. We give to the weak three months' instruction in the high school, in reviewing work of the grammar grade.

FRANK DAVID BOYNTON, High School, Ithaca, N. Y.—I believe that we Americans have one unfortunate characteristic. We have not the ability to get right down into the collar and pull steadily, day in and day out. This weakness exhibits itself in our education. We have too many subjects which we pursue for too short a time to receive any real discipline. I do not like Latin, but I appreciate the power that comes to the boy, who for several years with dogged tenacity, in spite of distaste, clings to its study till a reasonable degree of mastery is his. I would have him hang on to other subjects in the same way. The Germans do this; how successfully, you are all aware. Instead of stimulating the increase of superfluous subjects, let us give the boy a chance to continue any subject for at least a year, and thereby cultivate courage to overcome difficulties.

SUPERINTENDENT J. ANTHONY BASSETT, Richfield Springs, N. Y.—It seems to me that the time that has been spent this afternoon discussing the mechanical system of making promotions has been largely thrown away. If the principal and teachers know their students as they should know them, they are the ones who should settle on their judgment the question of individual promotion. Take any subject that I may teach, I know of the individual from month to month, unhesitatingly; whether he has gone up, or gone down; I know as surely at the

end of forty weeks whether he should be promoted. Under the percentage system, there is hardly one of you who has not met the case where the boy with 74½ ought not to fail, and the boy with 75 ought not to pass.

PRINCIPAL CHARLES I. PARKER, High School, Chicago, Ill.—I am in close sympathy with the last speaker. I do not believe that figures are of very much use in the settlement of nice discriminations in the matter of promotions; system requires that we use them, but I hardly need say that in our own system, we use them with judgment. Our minimum for promotion in a study is 75; but I remember very distinctly the case of a boy who had made only 70 in algebra. I took into account that he was of German parentage; I took other things into consideration and promoted him. He entered the University of Illinois, and his greatest success was in mathematics. Our figures are for the dear people, and we should be turned out if we failed to satisfy them. Into our pupils and into our mechanical systems, we must breathe the spirit of life through the exercise of common sense.

CHAIRMAN BLISS.—The hour set for adjournment has arrived; but before adjourning, as this method of round table conference is new in the Department, an expression of opinion is desired as to the wisdom of its use, to guide the officers of the coming year.

The vote called for was unanimously in favor of conducting future meetings of the Department on the round table plan.

CONGRESSIONAL WORK FOR YOUTH.

BY PRINCIPAL W. K. WICKES, SYRACUSE, N. Y.

On a pleasant summer afternoon, years ago, I saw a gray-haired man pushing a baby carriage across a greensward that was flecked with flowers. In the carriage was a little child whose eyes, already wide open to the summer splendors of the world of nature, soon caught sight of a bright flower. Instinctively it put forth its tiny hand to pick it, but it was beyond its reach. Then it was that the graybeard stopped the carriage, bent low, plucked the flower, and placed it in the hands of the delighted child, laughing back its thanks into the face of the giver. And the significance of the graceful deed, I thought, was this. It is the high privilege, as well as the bounden duty of each generation to minister to the generations younger than itself.

And if this privilege and duty devolve upon mature mankind in general, much more in particular, it seems to me, upon the teacher.

For to him must childhood and youth look for guidance and help along the "dim and perilous" pathways of the mind.

To me, a teacher, thus pondering upon my privilege and duty, long since came the question, how can I best fulfill my ministry and

service? After much thought the answer I reached was this: By that plan or device which will best develop in youth the power of expression, since the boy knows in a very real and true sense just as much as he is able to express, and no more; and, moreover, the art of expression is, in my opinion, the very crown of education.

Thus concluding, I could not but deem the founding of a congress for youth (an application of the national Congress idea, original with me so far as I know) a happy thought. And eight years of continuous and successful work have proven it. Today I am profoundly thankful for the inspired hour when that thought was born in my soul.

The congress is modeled upon the plan of the national body, subject to many modifications in detail, but keeping quite strictly to the spirit of that body. Thus there are two houses, the senate and the house of representatives. There are, or may be, many committees closely corresponding in number, kind, and title to the committees of the two national houses. There is also strict observance of the forms of parliamentary law.

Just here, however, it is best to depart somewhat from the plan of the national congress. In it the two houses are distinct in organization, in rules, in place of meeting. Even in these respects it is, of course, possible for a youth's congress to adhere to the national form; but unless a trusty leader can be found for the senate, another for the house, and a third for the congress presidency, it is better to have the senators and representatives meet in one a room, transact business and discuss bills as one body, though always voting as separate houses upon every measure or matter affecting the two houses. By this modified plan the same good will accrue to every member of both houses. The president of the congress is elected by joint ballot. The president of the senate should be chosen by the members thereof, and should be one of their own number; the speaker of the house, by its members, himself a member of the house. The clerk may be a member of either house, and should be chosen by joint ballot, the same with the treasurer. All committees, standing and special, should be appointed by the president, also, of course, the members of the cabinet, subject to confirmation by a joint vote of the two houses, inasmuch as he is at liberty to nominate his cabinet from both houses.

But I rely upon many helps to make congressional work interesting and profitable. Thus the congress has its "blue book" wherein is recorded the name of each senator and representative, together with the name of the state which he represents; its flag, to be cared for and to be raised by its members; its congressional library, containing food for reflection and hints for bill framing; its congressional record, with its epitome of the doings of the national congress; its cabinet, bring-

ing before a little group of the most active minds the greatest questions and problems of the day; its public meetings now and then, to bring out parents and the older folks of the community; its critic's report, made weekly by the president—made as kindly yet as searchingly as possible, embracing minutest details of the manner and method of speaking. But the greatest help to any congress is of course its president—indeed, there should be no thought of forming a congress unless a leader can be found who is young-hearted, intelligent, self-sacrificing, enthusiastic—in short, in thorough sympathy with the spirit of youth.

The congress then, I ask you to note, is not for fun. It has a very serious purpose as the very warp and woof of its life. True, it is shot through here and there with a thread of wit. I would give little for any organization that was not. When a young and much embarrassed member rises and says, "Mr. President, I arise to speak to my feet," the whole legislative and executive branches of the government are bound to laugh, but all good naturedly. When a little member, but strong in debate is dubbed by another as "my distinguished friend the infant Hercules," the congress applauds, and the appellation sticks.

Indeed, scarcely a congress night goes by without wave after wave of sparkling wit or repartee; but that does by no means retard the ship of state speeding on over the solid sea of debate. Nay, it puts "a freshening" breeze into its sails.

Again, the congress is not a passing fashion nor a pestilent fad. Too many such there are in the educational life of today. Give the fashion-plate and fad-fiend pedagogues their undisputed and unhindered way, and they will usurp the precious time of the pupil and the throne of the true teacher. But the congress idea is not a fashion, not a fad. It does not even ask for a moment of the school time of the student—it seeks no infringement, no abatement of the course of study. But it seeks to evoke and enhance the God-given power of thought and speech. Nay, it is rather an aid to the better, clearer expression in the class-room itself, as many a youth has testified, and many a parent with exaggerated yet earnest words has told me that he would prefer to have his boy miss the drill of the curriculum than that of the congress.

Consider with me for a moment the historical value that attaches to the congress idea. A bill is introduced for the election of United States Senators by the people, and is to be discussed the second week hence. Away the members fly to Madison's marvelous compendium of the debates in the Federal Convention of 1787, to see how the fathers of the republic reasoned about it, and thus to many an earnest youth is unsealed the fountainhead of our national life. Again, in his

history book a youth has read and studied the story of trials and triumphs in the American Revolution. His love of country wakens afresh, and he brings in a bill for the erection of a monument to Washington on the memorable battlefield of Trenton. Before the discussion is ended not only has many a glowing eulogy been paid to the "Father of His Country," but the whole story of the struggle has been rehearsed from the day when "the embattled farmers stood and fired the shot heard round the world." How shrewd, too, and really statesmanlike it was to introduce a resolution instructing the government, through the secretary of state, to secure the abrogation of the treaty of 1817 relating to the naval force on the great lakes. I am not sure but that Representative White "builded better than he knew" when he framed that resolution. There may possibly have lurked in its shadow the spirit of prophecy, for the day that shall "strike an universal peace through land and sea" has not yet dawned, and ships may yet thunder their death-dealing defiance. I do not mean, however, to imply that the S. H. S. congress longs for war, or ever has, for I find in the early annals of the congress a bill introduced by the representative from Georgia, entitled "An act concerning the establishment of an international court of arbitration." But my contention just here is not for peace, nor for world-wide federation, but for the historical value of a congress, a value which a score or more of bills in our own congress has incontestably proven.

Surely not the least among the good influences of the congress is its linguistic value. Indeed, I know of no practice in written English so fine as that to be had by the member who draws up a bill for the consideration of his fellows; no test in spoken English so searching and helpfully severe as a debate. A bill framer soon comes to understand that if the principle involved in his measure cannot be successfully assailed, its diction, unless logic-proof, may be riddled and his unfortunate bill be completely shot to pieces. And so in speaking. "I do not understand the gentleman," said a member. "I am not to blame," replies the speaker, "If the gentleman does not understand the English language." "Sir, I do," retorts the other, "but your language is not English." I am sure also that congress work enhances in the mind of every thoughtful member the real national value of the English tongue. And so it is that I find on our bill files an act seeking to establish English as the official language of the United States. That is a very difficult proposition to maintain, as any intelligent man may readily perceive; but the main thought, namely, that the use of the native language of a people is a great aid to loyalty is, I submit, a magnificent idea. If I am alien in my tongue, I may be in my head, and get unrepugnant notions; I may be in my heart,

and cherish undemocratic resolves; I may be in my hand, and seek to strike a blow against the peace and liberty of the commonwealth. But here I am concerned to argue the linguistic good that comes to young disputants themselves. The congress idea, allowing more interruptions than does ordinary, set debate, is the best sort of drill for rejoinder and repartee yet discovered. I could fill this paper with examples. Let one suffice: "What do we want Lower California for?" cried an impassioned speaker, "A mere tail to the continent!" "Let me tell the gentleman," retorted his adversary, "that the United States is considerable of an elephant, and much needs that tail."

It ought to take but little argument to show the political value a right-working congress must have. It will be understood, of course, that I do not use the word political in any narrow or partisan sense; but rather in that broad and unbiased sense which Alexander Johnston has always in view in his incomparable "History of American Politics." In the eight years during which I have presided over the S. H. S. congress there has never been a discussion along purely partisan lines. Many allusions there have been made to local and current politics; many a thrust at the foibles or follies of the party to which the speaker is opposed. These are not to be condemned, but commended—perhaps commented upon in friendly fashion. For the debater who ventures to make such criticisms must be sure of his ground or he may discover, too late, that his adversary has been laying pitfalls for his unwary feet. Political, not partisan measures abound with us. Indeed they must, for in a republican form of government they are the very essence of all legislative action. And now must the member have such practical and ready political knowledge that he may attack or defend, according to his beliefs. It will not do now to say, or intimate, that he is for or against a particular measure because his father belonged to this party or that. And it is for him to see to it that the principle for which he votes is a living, burning question; else would he be in danger of repeating the folly of the old Pennsylvania greenbacker who kept on voting that ticket for years after the party had perished, blandly saying, "A vote for a principle is never lost!" No, the political value of congressional work cannot be overstated, for it is as broad and deep and swift-moving as the ever-increasing currents of our political life.

But the historical, linguistic, and even the political values of the congress—great as they are—are overshadowed by its patriotic value. You may indeed tell me that the love of country is inborn. I grant it; may tell me that therefore it needs no kindly nurture no cherishing influences. That I must deny. Here Shakespeare's advice is

just in point—not to let “a God-like faculty rust in us unused.” Nay, must we not all cry with John Milton, “I cannot praise a fugitive and cloistered virtue, unexercised and unbreathed.” And so we keep the flag, symbol of our dearly won independence, and still more dearly won union and liberty, ever before our eyes. On every school day that flag floats from the staff from the top of the building—placed there by the committee of the congress; a committee never appointed by the president, but made up of volunteers eager for the honor. What a practical lesson in patriotism is the sight of the rippling flag! What congressman placing it there can fail to think of Webster, and to pray with him ever to see the flag “still full high advanced, its arms and trophies streaming in their original lustre, not a stripe erased or polluted, not a single star obscured!” Surely it was with the vision of that “gorgeous ensign of the republic” in his eyes, and with a quickened sense of its glory, that Representative Palmer of Delaware, offered a bill to prevent unpatriotic use of the American flag. I quote Art. 1, Sec. 3: The American flag shall be used only to denote nationality, freedom and liberty. Well do I remember the debate on that measure, and the merciless scoring given to American citizens who would so far demean their birthright and their flag as to advertise their wares upon its sacred colors. And it was in the same glowing spirit of patriotism that Representative Blum of North Dakota, introduced a concurrent resolution forbidding the display of any foreign flag on any public building in the United States, except on occasions of a visit from a foreign sovereign or potentate; and that concession, he explained, was in order to let everybody see “Old Glory” flying above all other and lower ensigns. “Gentlemen,” once cried Senator Phelps, “let us not go down in history as a generation that could not keep the flag where our fathers placed it!”

But the flag is not the only inciter to patriotism. It happens not seldom that the meetings of the congress fall upon, or near unto, great anniversary days in the nation's history. Then the discussion is put over and the great event is made the special order of the day. So it came to pass that the congress celebrated the birthday of Abraham Lincoln. It was a surprise and delight to see how deeply many of the members had studied the unique greatness of the martyr statesman, and how keen their analysis of his power—but better than all, how reverent their regard for his memory, how glowing their appreciation of his matchless patriotism. Indeed, their thought is that of the old Latin writer—nothing that pertains to humanity is alien to us. And so their cheeks blazed in indignation as they read the awful story of Turkish atrocities upon the affrighted, yet faithful Armenians, and they straightway empowered and directed the general government to

remonstrate with barbaric Turkey through the potent voice of American men of war. "Child's play," do you say? Oh no; they did as much as our own national congress, and they were far more honest in their indignation than the great powers of Europe.

So the congress keeps its finger upon the political pulse of the world; and though it may not correctly or completely diagnose every disease of the body politic, its heart is sympathetic, and the congress of the Saline City will never fail to prescribe generous doses of the saving salt of patriotism, for the spirit of the whole body is that of one of its members who, ardently arguing for our home industry, and mixing his figures of finance and of speech in a fashion that Sir Boyle O'Roche might envy, cried out, "Mr. President, we don't want any foreign salt; what we want is to fill ourselves up with American salt, so we 'll be ready to die for our native land!"

It may surprise you now when I say that the congress idea has a greater value than any I have yet mentioned. For after long observation I am sure that its personal value outmeasures all other values. It is the merest truism, of course, to say that the chief duty of a boy is to become a man, yet its triteness detracts not a whit from its true-ness. And I know of no place better than within congress walls to cultivate the manly spirit. As a matter of policy, to say nothing of principle, that is the place for the utterance of truth. And it is easy to speak the truth here, for no member is bound to speak or to vote save as he believes in his very heart. He has every reason to exclaim with Milton, "Let truth and falsehood grapple; whoever knew truth put to the worse in a free and open encounter?" Again, congress is the place for the exercise of a true and unceasing courtesy. It is the invariable custom with us to salute a new member, the first time he arises to speak with clapping of hands. It may possibly disconcert him a little; but better that than the discourtesy of painful and boding silence. If, then a congressman speaks noble words of truth, and in a courteous fashion, he surely is not far from the realization in himself of that famous definition of a gentleman—"High-erected thoughts, seated in the heart of courtesy." And it is of value also to acquire somewhat of dignity—not a rolling-collar and starched-cuff dignity, but a frank, manly bearing. As a teacher I have sometimes with good effect, told boys that certain acts were beneath their dignity as congressmen. (Yet I do not often venture that argument, remembering how Mr. Blaine, once a teacher, was berated in the national congress for his schoolmasterly and scolding ways.) But congress has a personal value for a conceited youth, inclined to "strutting under his advanced plumes." He is speedily, yet not unkindly, given to understand that it is wise for him to dismount from

the high hobby of his conceit, and amble along on the lowly rocking horse of humility. Thus he may avoid the fate of certain statesmen of older growth thus characterized by a congress youth—"They go to bed famous and sleep it all off before morning."

Men and brethren, let me now ask the practical question, can we ourselves as teachers afford to miss the good which congressional work is so well fitted to do unto us? Are we not so much inclined to walk "along the cool, sequestered vale of life," that we lose sympathy with those who are bearing the burden and heat of the day along the sun-beaten paths of daily life? Do we deem our duty done when the schoolhouse door shuts for the day, and the pupils make a dash for liberty and fresh air? Has the community no claim upon us to contribute, by example and precept, to the betterment of its civic life? If we may not get into the swirling currents of its caucuses and conventions, may we not at least give to our boys, through their own deliberate thinking and speaking, some knowledge of right political principles, and a wholesome detestation of political chicanery? And has not our common country, as well as our community a claim upon us, first to lay broad, deep and strong the foundations of a knowledge of her glorious history, and then to superimpose upon that a splendid structure of personal patriotism, rising "like an exhalation," not with "sound of dulcet symphonies," but to the nobler "music of the union?"

And believe me, not only ought we, both as American teachers and citizens, to be in tune with our national life in all its achievements and aspirations, but we ought to put ourselves in touch with the young life about us. To be in tune with the life of the nation. To be in touch with the life of youth! What is it, brethren, but to be made young ourselves? Now I am aware that no board of education requires this at our hands, no course of study compels it. Nay, all the boards and courses in the nation could not compass such a consummation. But we ourselves may so strike the chords of young life as to make them vibrate responsive in our own souls. Pardon me for saying that on many a Friday evening I have gone to congress meeting tired in every joint of body and mind, and gone away revived and rejuvenated.

Yes, fellow teachers, it is after all life, more life, that we need, that the world needs. Knowledge is good, wisdom is better—but life, as the transmutation of knowledge and wisdom into action, is best of all. And I submit that a pupil may pass through the long curriculum from kindergarten through university, and come forth crowned with scholastic honors, and yet gain little knowledge of the life that is beating and surging in the veins of the world. This is, to him, a

tremendous and perchance may prove an irrevocable loss. For the passivity of "the studious cloister's pale" is not fitted for this age and land; large upon the vision of the student looms the intense practicality of life. Nor does this mean that the retorts and crucibles of study must be thrown aside; it means that all the knowledge that is placed therein must be fused and blended in the white heat of life and action.

So I lately welcomed a bill which provided for the introduction of the metric system as the standard for weights and measures. Why? Not because the theory was all important, but because many a strong argument of commercial life was evoked, many a hint thrown out as to foreign habits and customs, and more than one suggestion made that that life was being weighed and parceled out in the scales and balances of an effete civilization.

"The law of egoism is before that of altruism," said Herbert Spencer. In plain English that meant, I must help myself before I can help others. Nay, let me put it more truly thus: I must nourish my own life in order that I may nourish the lives of others. Just here, fellow teachers, is our duty—this, our golden opportunity. Let me then in these closing words plead the cause of our boys and youth. I grant that your curricula are strong, your teachers earnest, your work good. But the social spirit of the times is very marked—omnipresent; the athletic spirit of our youth, most strong—omnipotent. In the athletic craze the young men of our colleges daub their towns fiery red for victory, or drape them in silent black at defeat; and the boys and youth of our high schools and academies ape the actions of their biggers if not their betters. Indeed, Hercules is now the God of the college world, and with his mighty club has bethumped whole faculties into submission, or changed them by the magic power of his demigodism into shouting votaries, wild as lotus eaters. So, many a boy of excellent pith is fast letting his brains run down into his heels, and soon a new edition of Ainsworth Physiologies will be needed to teach fast-growing youth the ill effects of stimulants upon the feet as the organs of the brain! In other words, curricula, teachers, work, may lose their grip upon the youth. See if you cannot win them back to study and the life intellectual by an appeal to their love of speech and country and noble deeds. It can be done, for it has been done, I know. Nay, teachers, it must be done, and everything must be done by us to help to arm the rising generation for its battles. For while no man is so wise as to forecast the future with certainty, surely there is none so foolish as not to see, though dimly, fast-shaping and portentous clouds in our political sky. The socialists in New York City, we read, will put up an unnaturalized alien for the presidency.

What does that mean? It means that at some time the youth of today must brain that heresy with their brains. This very week a host of men, many misled, many on mischief bent, are seeking to degrade our financial honor. Let us teach our youth that we will not now, that they must never, submit to such degradation. Let us teach them constantly political morality, political righteousness—that in the magnificent words of Milton our young men may be “Inflamed with the study of learning and the admiration of virtue; stirred up with high hopes of living to be brave men and worthy patriots, dear to God, and famous to all ages.”

WHAT IS A SECONDARY SCHOOL?

BY E. W. COY, PRINCIPAL HUGHES HIGH SCHOOL, CINCINNATI, O.

The terms elementary or primary, secondary, and higher, as applied to schools and education, have been used without any very exact or well-defined meaning. The definitions of the terms themselves, however, furnish a sufficient clew to their general application. Elementary education would seem to be a proper name for that part of education which deals with the elements of subjects. The term primary education, or primary school, suggests that division of education or that school to which the child is first introduced. That part of the education of the youth which comes second in order of time and which, therefore, follows primary education, may properly be denominated secondary education; and higher education is simply higher, or more advanced than secondary.

But where does elementary education end and secondary education begin? and where does secondary education end and higher education begin? What are the distinguishing characteristics of these three divisions? Do they depend upon the subjects pursued, or are they merely matters of convenience with no underlying principle, or is there a rational basis for such a division of the educational field?

This threefold division of education is not a new thing. We have borrowed it from European practice, and the European schools in turn from the peoples of antiquity, especially from the Greeks, for in Plato's “Republic” and “Laws,” there are indications that he recognized in his day a similar division of education. Some of those who hold to the so-called culture epoch or colossal-man theory, would have us believe that there are as many distinct stages of education as there are years of school life, but this is too fanciful for general acceptance. But it is not difficult to find a basis for the threefold division

of education in the three stages of individual development — physical and mental — which are generally recognized. We speak of childhood, youth and manhood very much as we speak of primary, secondary and higher education. Childhood is the time when the memory and sense-perception are especially alive and active, and this is the period of primary education. Youth is the time when the reasoning and judgment, the reflective powers, rise into prominence, and this is the period of secondary education. In manhood, the powers of the mind fully matured and developed, are ready for service in investigation and research, in widening the area of knowledge and the early years of this period are given to higher, or university education. As we can set no arbitrary boundaries to the stages of individual development, so we can set no such boundaries to these divisions of education. Childhood merges gradually and imperceptibly into youth, and youth in like manner into manhood. So primary education, passes gradually and imperceptibly into secondary and secondary into higher. When sense-perception and memory cease to be the principal faculties brought into exercise, and the reasoning and judgment are assuming the most important place in mental activity, then the youth may be said to be ready for the secondary school. The chief work of the secondary school is the cultivation of these powers. Its keynote is discipline, training.

It is not possible to make this division upon the basis of the subjects taught, because most of the subjects found in the curriculum of the secondary school may in some of their phases find a place in the elementary or primary programme. History, for instance, in the form of stories and simple biographical sketches, furnishes valuable material for elementary instruction; while in the study of the careers of nations and of the causes and results of events, it falls properly into the course of the secondary school; and, again, in a still broader view embracing wider generalizations and the causes and results of great race movements, and the investigation of original material, it belongs in the university. Geometry, again, which is usually regarded as specially belonging to the secondary school, in some of its concrete forms is peculiarly fitted for use in the elementary school. So the beginning of foreign languages is elementary school work. The same is true of the natural and experimental sciences and of literature. So that we cannot say that these subjects belong exclusively to the secondary school. The beginnings, the foundation of all these subjects should be laid in a very substantial way in the elementary school, where they properly belong. In many instances some of these subjects will be found upon the programme of the elementary school, but they have too often been regarded as interlopers and have failed to

receive anything like just and adequate treatment. The demands of arithmetic and formal grammar and the geography of unknown regions have usurped the place that might better be given to these more fruitful subjects.

Again, the secondary school has often been overloaded with a multiplicity of subjects, many of which have no claim to a place in its curriculum. One fully competent to speak on this subject has said that "The great stumbling block in the way of our secondary education is not poor teachers, nor bad methods, nor inadequate equipment, nor even school committees, but it is the plethora of subjects." Some of us connected with city high schools cannot help being painfully impressed with the fact that it is not possible to cover the whole field of knowledge in a period of four years with boys and girls from fourteen to eighteen years of age. Professor Hinsdale, in the summing up at the close of his admirable discussion of "The Dogma of Formal Discipline" before the council two years ago, puts in a plea for a "measurably extended curriculum" as necessary to insure a well-rounded mental discipline.

I do not wish to offer any objection to this; on the contrary, I agree with it most heartily, and not at all as inconsistent with it, but rather as supplementary to it, I should like to put in a plea for a measurably *limited* curriculum for the high schools and for the secondary schools in general. Undue congestion is the most serious malady from which our high-school courses of study are suffering today—a congestion arising both from the amount of class work and from the number of different subjects embraced in the course. What is now needed is a judicious depletion of hours of class work and of the number of subjects on the programme. Contraction rather than expansion, limitation rather than extension, should be the motto of all friends of these schools. When the time of a pupil is divided up among six or eight different and distinct subjects, one-half of which come but once or twice a week, it is manifest that the conditions are not favorable to sound culture. Such a state of things is conducive to mental distraction rather than mental discipline, to dissipation of energy rather than to the acquisition of power. While a measurably extended curriculum is needed, still it should be *measurable* and not *unlimited*.

It has been so often said, and is so universally conceded that it seems hardly necessary to repeat it, that the secondary school in the United States has a twofold function to fulfill. It attempts to fill the place in our American community that is filled in Germany by the two classes of schools, viz., the Gymnasias and the Real Schule. There are some advantages and some disadvantages in this attempt to combine these two functions in a single institution. But I will not

dwell upon this point. Suffice it to say that our secondary school undertakes to prepare for higher institutions—classical and scientific—the comparatively small number of students who are able to continue their studies in these institutions, and at the same time to prepare for the duties of life, the larger number of students who are unable to continue their studies beyond the secondary school. In other words, our secondary school is both a fitting school and a finishing school, and all will concede that it is in this latter capacity that it does its chief work. President Eliot has stated this very clearly. He says, "The secondary schools of the United States, taken as a whole, do not exist for the purpose of preparing boys and girls for colleges. Only an insignificant percentage of the graduates of these schools go to colleges or scientific schools. Their main function is to prepare for the duties of life that small proportion of all the children in the country—a proportion small in number, but very important to the welfare of the nation—who show themselves able to profit by an education prolonged to the eighteenth year, and whose parents are able to support them while they remain at school." Still, in view of the great liberality of the colleges today in the variety of courses offered by them to the young men and women who decide to enter upon a college course, there would seem to be little or no incompatibility between fitting for college and fitting for the duties of life. The young man or woman who, in the secondary school, has made the best preparation for life will generally find a college course awaiting him if he chooses to enter upon it. If, to accomplish this, it should be found necessary to omit some of the ambitious subjects that ambitious secondary teachers have introduced into their programmes, the secondary school would not suffer any loss. And here, again, the number, variety and character of the subjects to be included in the curriculum come up for consideration. But it will, I think, be readily granted that the boy or girl who, during the four years from fourteen to eighteen, has given his time and energy to a reasonably limited number of subjects, and has pursued them somewhat continuously and with something of completeness and thoroughness, will not only gain more knowledge and have his powers better trained and disciplined, but will also be better fitted to enter a higher institution of learning or to enter upon the duties of life than the one who has taken a taste of everything and has appropriated and assimilated very little of anything.

In the present organization of education in this country the proper work of the secondary school is divided up among three different classes of schools. The elementary schools, or the schools below the high schools, are continued until they cover two or three years

that should be given mainly to secondary work. Then comes the high school, and following it the first year or two of the ordinary college is taken up with what is properly secondary work. A theoretically correct threefold division of education would give us approximately six years for the elementary school, six or seven years for the secondary school, and then three or four years for the university course. But all our traditions are against such an organization, and these traditions must command a certain degree of respect. We have inherited with our Anglo-Saxon blood a disposition to look rather to practical efficiency than to theoretical consistency. What we in general want to know is whether the thing works well, rather than whether it conforms to some theory, however admirable that theory may be. And if our education should in the course of time be reorganized along the lines indicated, it would be because the people had been brought to see that such a reorganization offered important practical advantages over the present system. The American college has an important function to perform in our educational life, and doubtless, will continue to have for many years to come. Though there is a manifest tendency in some quarters to stretch out the work of the secondary schools so that it may connect with the university proper, this attempt has not in general been regarded with favor. So far as the public high school is concerned, I do not believe that public sentiment is ready to sustain any material upward extension of its course. But its extension downward I believe to be both practicable and desirable. Under the present arrangement, elementary subjects and elementary methods are continued too long and are followed too exclusively. The result is seen in the many cases of arrested development of the reasoning power with which every high school teacher is familiar. Secondary school and secondary school methods should begin at least two years earlier than at present, and that work should be in the hands of secondary school teachers. The difficulty experienced in passing from the elementary school to the high school is due to the fact that it involves an abrupt change of method and of subject—a change that should begin earlier and should take place gradually. The introduction of secondary school work into the lower school will not meet the case. What is needed is teachers who have been trained in secondary work and who are not standing with their faces constantly turned towards the elementary side. The elementary school is a poor training school for secondary school teachers, just as the secondary school is a poor training school for college and university professors. Again, there is less difficulty in securing thoroughly educated teachers for the secondary school than for the elementary. The recommendation of the Committee of Fifteen is generally concurred in,

namely, that the high school teacher should have at least a college education. The same requirement is not demanded for teachers of the lower schools. There is nothing more unphilosophical and more unpedagogical in all our educational practice than the custom of pursuing elementary work by elementary methods through the eighth year of the school course, and then all at once changing to secondary work by secondary methods at the beginning of the ninth year.

With such a change in our school organization the work of the secondary school can be successfully done. On the present plan, with a four years' course, beginning where the secondary school is expected to begin in our public school system, and ending where it is expected to end, and including what it is expected to include, no satisfactory programme of work can be made out. The Committee of Ten, who planned and carried out the most systematic and elaborate investigation of secondary schools ever attempted in this country, had this difficulty forced upon their attention when they came to make out their programmes. They say, "In preparing these programmes the committee were perfectly aware that it is impossible to make a satisfactory secondary school programme, limited to a period of four years and founded on the present elementary school subjects and methods. In the opinion of the committee, several subjects now reserved for high schools—such as algebra, geometry, natural science, and foreign languages—should be begun earlier than now, and therefore within the schools classified as elementary; or, as an alternative, the secondary school period should be made to begin two years earlier than at present, leaving six years instead of eight for the elementary school period."

The alternative here presented, namely, the beginning of the secondary school two years earlier, is the plan that I think would greatly improve our school organization and the one that I hope may be generally adopted at an early day.

DISCUSSION.

DR. B. A. HINSDALE. Ann Arbor, Mich.—The question set for discussion is, "What is a Secondary School?" The gentleman who has spoken has given his answer. This answer I shall not make the subject of special comment. How far my own answer agrees with his answer, and how far it diverges from it, will be apparent to all those who favor me with their attention. The question is, "What is a Secondary School?" My answer to this question is that a secondary school is a school whose characteristic feature is secondary education or secondary teaching. It is often the case that much primary education or primary teaching is found in secondary schools so-called.

This is true of the German gymnasia, of the French colleges and lycées, and of the English grammar and endowed schools. But my answer is that a secondary school is one that is characterized by secondary education or secondary teaching.

You tell me that this is only pushing the difficulty one step further along, and I hasten to admit the fact. What, then, is secondary education? It is true, as Mr. Coy has remarked that the tripartite division of education is of ancient date. It is also true that it now prevails in all progressive countries. On what basis does this division rest? Does it rest merely on convenience? Does it rest on the social needs of society? Does it rest on the special preparation of teachers who teach in secondary schools? It is true that these things are in some measure and in one or two of them in large measure, involved. At the same time they are but superficial facts and do not furnish the real basis of the division. The division of education into primary, secondary, and higher rests, as I understand it, upon the subjects which are taught, and the methods that are employed in the schools in which these three kinds of education are given. In the elementary certain educational arts are taught, as reading, writing, and the elements of mathematics, drawing, etc. What is more, the simple or elementary facts of all the great divisions of knowledge should also be taught; the facts of nature, of history, of literature, of social and political life, of mathematics. But not only are these facts simple and elementary, they are to a great extent empirically presented. The receptive faculties of the mind are active in this period of child development. There is indeed some discipline of the higher faculties of reason, but after all the elementary school itself takes its character from the elementary school arts and elementary facts. The characteristic of the secondary school is to give discipline. School arts are now supposed to have been acquired. Many more facts, ideas, and thoughts are indeed taught pertaining to all the subjects that have been introduced in the earlier stage, but they are more advanced facts, and are handled in a more formal way. The faculties of the mind that are active are not so much the receptive as the analytical faculties. Some attention is paid to relations, but these are the relations that exist among facts belonging to the same groups. Secondary education does not go beyond science; it has nothing whatever to do with philosophy. The great end of higher education is knowledge. The student is now to use the tools that he has acquired in the elementary school, and the discipline that he has gained in the subjugation of some considerable portion of the great kingdom of knowledge. Properly speaking, his education now does not look to discipline, although of course it involves discipline. It deals with facts, with ideas, with thoughts, as before, but of a higher character than before. He deals with those relations of facts that give character to science, but he goes beyond the relations that bind facts together within their several groups, and gains some grasp of that great total which forms the subject-matter of philosophy, which deals not with limited but with universal relations.

Such I conceive to be the most general facts or characteristics of the three kinds of education. It must not be supposed that they pass suddenly, by a leap, from one to the next. The individual has but one life; his being is continuous. The masters of historical method say that transition or development is a law of being. Hence there are no hard-and-fast lines between elementary education and secondary education, or between secondary education and higher education. At the same time, taking the three periods or *stadia* together, we have no difficulty in recognizing certain characteristic facts that mark the three periods or *stadia* off from each other, and so furnish the basis of the tripartite division.

DEPARTMENT OF HIGHER EDUCATION.

SECRETARY'S MINUTES.

FIRST SESSION.—THURSDAY, JULY 9, 1896.

After the adjournment of the joint session of the Department of Secondary and Higher Education, held July 9th, a brief special session of the Department of Higher Education was held in Asbury M. E. Church, Buffalo, N. Y., President James H. Baker in the chair.

President Baker appointed at this meeting the following Nominating Committee:

Andrew S. Draper, President University of Illinois; William F. King, President Cornell College, Iowa; Elmer E. Brown, Professor of Pedagogy, University of California.

SECOND SESSION, FRIDAY, JULY 10, 1896.

The second session was called to order in the Asbury M. E. Church, at Buffalo, N. Y., at 3 p. m., July 10, 1896, by President Baker of Colorado, who opened the session with a brief address.

Professor Morse Stevens of Cornell University, was introduced and addressed the department.

Andrew S. Draper of Illinois, chairman of the Committee on Nominations, submitted the following report of that committee which was unanimously adopted:

For President, Joseph Swain, University of Indiana.

For First Vice President, Jacob G. Schurman, of Cornell University.

For Secretary, George Parker Winship, Providence, R. I.

The officers above-named were declared duly elected officers of the department for the ensuing year.

President Baker introduced Dr. William R. Harper, president of the University of Chicago, who addressed the department on the "Chicago System of Requirements for Admission."

President Baker then introduced Professor Thomas J. Seymour, of Yale University, who addressed the department on the subject of "The Yale System of Entrance Requirements."

President Joseph Swain of Bloomington, Indiana, President-Elect of the department, was introduced and acknowledged the honor of his election, soliciting the active support of the members of the department in the important work of the ensuing year.

Principal W. H. Smiley of Colorado, offered the following resolution, which was unanimously adopted:

Resolved, That the cordial thanks of the Department of Higher Education are hereby extended to the local committees, who have made the visit to the city of Buffalo so pleasant to all members by their business-like arrangements and by their social courtesies during the sessions of the past week.

President Goodknight of Morgantown, W. Va., offered the following resolution, which was unanimously adopted:

Resolved, That the thanks of this department is hereby tendered to the officers of this department for the efficiency with which they have discharged their difficult duties during the past year.

On motion of President Goodknight the officers of this department were authorized to hold a joint session with the Department of Secondary Education if in their judgment such joint session is deemed advisable.

Secretary-Elect Winship was called for and responded, accepting the duties of his office with assurance of their faithful discharge.

The department then adjourned *sine die*.

JOSEPH SWAIN, *Secretary*.

PAPERS AND DISCUSSIONS.

HOW TO SECURE THE INTEREST OF THE COLLEGES AND UNIVERSITIES IN THE DEPARTMENT.

BY PRESIDENT JAMES H. BAKER, UNIVERSITY OF COLORADO.

[A SYNOPSIS.]

Causes of the isolation of institutions of higher learning:

- (a) The independent position of the college historically.
- (b) The rivalry of interests.
- (c) The traditions and unique development of each institution.
- (d) The exclusive devotion of the professors.
- (e) The disposition to ignore pedagogical problems.

Interests may be increased:

- (a) By choosing fresh topics of prime importance.
- (b) By placing on the programme representatives of leading colleges and universities.
- (c) By issuing circular letters inviting every college to send a representative annually to the meetings of the National Educational Association.
- (c) By joint investigations, such as has already been inaugurated of the relation between the secondary schools and the colleges.

There are topics of the highest importance for common discussion at these meetings, among which may be noted:

- (a) Uniform plan for admission.
- (b) The standard that by common consent should entitle a college or university to recognition as such.
- (c) Length of the college course, and the relation to graduate courses.
- (d) Standard of the professional schools and their relation to the college.
- (e) Methods in the light of the philosophy of education.
- (f) The problem of the higher life and interests of the student body.

HISTORY IN THE SECONDARY SCHOOLS.

BY PROFESSOR H. MORSE STEPHENS, CORNELL UNIVERSITY, ITHACA. N. Y.

(STENOGRAPHIC REPORT.)

Mr. President, Ladies and Gentlemen:

I did not understand that I was to talk until after the papers had been read. I was therefore sitting quietly prepared to listen to other people for a little time before it became necessary for me to speak. But now I have been dragged from the obscurity of my corner to deliver my address before I have composed it. When I studied the programme I found that the subject assigned to me was not a subject connected with higher education, but the subject of the teaching of history in secondary schools. It seems perhaps that this subject would have been more appropriate for the department of Secondary Education, but when I reflect I perceive that any instruction in history in the universities must necessarily depend upon the character of the instruction in history given in the secondary schools, and that it is perhaps not entirely without advantage that I should have an opportunity to speak to an audience which I am informed contains more people interested in secondary than in higher education.

I do not think it is necessary for me to defend the teaching of history in the secondary schools. I presume it is universally recognized that if any subject needs to be taught in the secondary schools it is the subject of history. I heard in the morning sessions a defense of the teaching of literature; a defense of the teaching of natural science and of nature study in the schools; but nobody has thought it worth while to defend the teaching of history; because, I presume, it is taken for granted that if any subject is to be taught at all, it is the subject of history. If it is of some interest to understand the life-history of a tadpole, or to be acquainted with the great works of literature of the past, it is even more important that every individual pretending to the smallest amount of education should have some knowledge of the history of the race, of the history of the nation, of the history of the community to which he belongs. At the meeting of the round table on historical teaching which was held in this building yesterday, the very able and accomplished chairman at that meeting gave five reasons, if I remember rightly, why history should be studied in schools, or rather five aims towards which historical teaching should trend. I doubt whether it is necessary to give reasons for the teaching of history. Surely the advantage of knowing the

details of the past of the country, and of the race to which one belongs is sufficient reason of itself. But further, some of the aims or reasons given seemed to be distinctly derogatory to the study of history. The study of history was defended because it had an ethical value. It seems to me that if history is not worth studying for its own sake it is not worth studying at all. Further, it was defended because history was a useful aid to the encouragement of patriotism; but a patriotism that has to be nourished upon the knowledge of the past glories of the country is not a patriotism worth a very great deal, more particularly if it is a patriotism that has to be based upon patriotic histories—histories devoted not to the relation of absolute truth, but to the glorification of the great men of the past. History deserves to be taught for its own sake, and the great aim should be to teach all children—and adults perhaps, most of all—the course of events of the past as they actually occurred; to tell the truth, the whole truth, and nothing but the truth; and not to lead children away into a spurious hero worship, or cause them to look into history for the illustration of the great qualities of their grandfathers or great grandfathers, or for the justification of any modern forms of political institutions. If studied for its own sake, then the point that is to be brought out by the teacher, the chief point that I desire to bring out, is in what way it may be most profitably studied.

If it be granted, as I think it should be granted, that the study of history is important, that the study of history is necessary, how is history to be taught? What methods should be adopted for the teaching of history? I intend, instead of dealing with generalities, instead of talking at greater length upon the study which has occupied the whole of my own life, to deal rather with a few practical points with regard to the teaching of history in the secondary schools. In the interesting talk we had yesterday two divergent methods for teaching history in secondary schools were advocated by different speakers. The one was the old-fashioned text-book method; the other was the adoption in secondary schools of the system now in use in post-graduate courses in American universities, and above all in German universities. Both methods have their uses. The study of history from original materials is undoubtedly the only way in which the method of historical investigation can be properly explained; it is the only way in which men can be trained to become historians. Every boy who goes to a secondary school, however, is not intended to be a historian; otherwise in the making of histories there would be no end. On the other hand, the old-fashioned teaching, the simple learning by heart of a text-book, has been as universally condemned in historical teaching as it has been in other departments of

education. The old-fashioned way of using a text-book and setting the unwilling pupils to learning so many pages or paragraphs by heart needs no condemnation before an assemblage of enlightened educators. What method is there that can be adopted which will be an improvement upon the old text-book method and will not make such extravagant demands upon the intellect of the pupils and upon the energies of the teachers as the study of history from original documents? Between these two extremes there is a middle way which can be adopted. I speak with some confidence, because this middle way, which I intend to advocate at some length, has been adopted with signal success in the English secondary schools. The English secondary schools did not receive a very good character yesterday. As an Englishman I can assure you that the English secondary schools have nevertheless attempted some new methods of teaching which may be of use even over here, where your secondary schools are, according to the President and other speakers of yesterday, so very much in advance of what we have in our poor effete system. It should be remembered that most of the great English schools are boarding schools, and it is because they are boarding schools that they are to a great extent class schools, for it is only people of considerable means who can afford to send a child from home nine months in the year to Eton or Rugby or elsewhere. But side by side with these great boarding schools there exist a large number of secondary day schools like St. Paul's, the City of London School and others in the great English cities for the education of children from fourteen to eighteen years of age. In my own school days the teaching of history in the great English schools was by the vile old text-book method. But since that time there has developed a new system which I wish to describe to you. Two or three months before I left England for America, two years ago, I published an article on the subject of the teaching of history in the English schools. In that article I developed at length the main points which I wish to describe to you here. Taking the secondary schools as schools containing pupils from fourteen to eighteen it has been found far more advantageous to supplement the study of the text-book by lectures delivered much in the style of college lectures. The lecture system, I know, is in this country not generally adopted until the college stage is reached. But the one subject which, above all others perhaps, lends itself to treatment in lectures is history. Now, lectures on history are given regularly in many of the great English schools containing boys fourteen and fifteen, and up to eighteen, until the time they go to college. The great advantage of supplementing the text-book by lectures is that in that way the dry words of the text-book are illuminated by the personality of the

teacher. The success, then, of the system of teaching history in secondary schools by means of lectures depends upon the employment in the school of some teacher who has received a sufficiently clear insight into the methods of historical work to be able to lecture with spirit and wide knowledge. When I was a schoolboy the masters who taught history were the same who taught classics, mathematics, or any other subject. Nowadays there are masters in the great English school who have nothing to do but teach history to the different classes. These men are men who in their college work have taken an especial interest in history, and who have been initiated into modern methods in the study of history and of historical questions. The way in which the system is carried out in such a school as Haileybury, which is the one I at present have in mind, is that the class is set to reading a selected text-book, chapter by chapter. There are three periods a week devoted to history through the whole school course. A certain chapter is studied each week; and of the three periods two are devoted to lectures and the third to an examination upon the chapter of the text-book and upon the contents of the lectures.

First the pupil reads the chapter. Then it is treated of in lectures. One of the advantages of attending a good lecture is that it teaches the student how to take notes. As a rule I find with students who come to me at Cornell that I have to begin by teaching them how to take notes. They generally have not learned how to take useful notes. At first I was surprised to hear in England that boys of fourteen and fifteen could take respectable notes. The pupils listened attentively to the teacher's comments upon the chapter of the text-book. The teacher of course, has read many more books on history than the teacher who has devoted himself to the teaching of other subjects. Say the subject is the reign of William the Conqueror in English history. The teacher will have read Freeman. He will put his knowledge to use and lay weight upon the personal points in the character of William. Or he will read striking passages from original documents, or he will illustrate the meaning of the text-book by notes. Sometimes a session will be held when the stereopticon will be used and illustrations thrown upon the canvas for the further enlightenment of the pupil's insight into the period under discussion. After two such lectures a written examination is held during the period devoted to the third lesson. Sometimes it is a mere examination of facts. The boys tell what they have learned from the text-books and the lectures about two or three men, and there become fixed upon the mind the chief points that have been emphasized in the course of the lectures. Sometimes, instead of an examination, an essay will be written. I do not want to say that this is an ideal, perfect system for

teaching history in secondary schools, but I do think that it is very much better than the learning by heart of the text-book and emphasizing questions and answers; and that it is far more practicable than the system of endeavoring to teach children from original sources.

As I have said, one indispensable qualification for teaching by this method is to have a lecturer who will illuminate the dry matter of the text-book, and this depends upon the personality of the lecturer. Now, it is not every teacher who desires to teach history—more is the pity from my point of view. But at any rate a certain proportion of the students at universities who desire to devote their lives to teaching do have an especial interest in history. If such students have during their college course paid special attention to historical work they will have received something of the enthusiasm which is the result of careful study of modern scientific methods in historical work. These are the men and women who should be entrusted with the teaching of history in secondary schools.

I need hardly, I suppose, go at length into the points that distinguish what we historians speak of as scientific methods in the study of history. You must know that it depends mainly upon the careful examination of original material. Such work cannot be done in the schools; it can be done in the college. Any college student led by a teacher who knows his business, to the examination and appreciation of original documents, if even upon the smallest possible period in history—a period of six months—any diligent student, I repeat, will receive such an insight into what is the aim of historical work that he will be able to comment with enthusiasm and a seeing eye upon the passages of the text-book which is being used in the school. The one demand of the modern scientific school is that the work of historical research be conducted as far as possible so as to discover the truth. No diligence in toil, no amount of patriotism, no earnestness of ethical lessons, nothing, can compensate the modern historian for the absence of a desire to find out the truth. This thoroughly implanted in the student, he will love to study history and he will be able to impart to the children whom he is teaching historical knowledge of value in the practical affairs of life. He will be able to comprehend and draw inferences and often to perceive in the works of the writers of historical text-books, lessons in advance of their thoughts. He will be able to point out that there are two sides to every question. It is a misfortune to use a text-book which paints some characters as angels come down to earth from heaven, while it treats of other characters as without any redeeming qualities whatsoever; but the trained historical enthusiast will be able to repress these inequalities, which appear even in reputable histories, by pointing out

that historical characters are neither angels nor demons, but simply men and women. He will be able to illuminate with his personality the striking events of history, and the dry and commonplace words of the text-book that is being used.

I desire then to advocate this method of teaching history in the secondary schools, because I know it has been successfully carried out. It demands the existence of a teacher in the secondary schools who has had a thorough and proper training in the modern or scientific sense, or who at any rate has had an insight into the scientific method, and, that guaranteed, nothing but success will result. History will cease to be considered a mere collection of facts. The striking points will be illustrated by the lecturer and under the power of his personality he will inspire into it such life that the student will remember not only what is written down in the text-book, but the greater meaning which lies between the lines.


This system, further, is suitable to comparatively young students. A gentleman whom I see present here, informed me that he had used, with the greatest success in his school, the thesis method during the last year, and I can well understand that no more valuable method of historical work could be pursued than setting every student who graduates in a secondary school, to work upon an original essay on a given subject. If any such students have a real desire for investigation, a desire to discover the truth, they will doubtless use all the authorities they can find, both original and derived, that they may be able to do the best work.

In the pursuit of such investigations they find a valuable intellectual training, and the results of their labors may be of positive value to the world. The use of the thesis, then, in the final year, I should think might be proper for adoption in schools where there is a teacher sufficiently qualified to direct such thesis work.

One other point upon which I desire to dwell is upon the question of whether or not the results of historical studies of this sort in the secondary schools could be made use of in the entrance requirements of colleges. I hold in my hand an invitation from the Association of Colleges and Preparatory Schools of the Middle States, to consider the subject next November, "Shall historical studies be a necessary part of college entrance requirements?" I presume the answer will be "Yes." I know for my own part I shall be glad to defend the necessity of making history one of the college requirements. But then comes the question, "How can historical knowledge be measured as an entrance requirement?" I think every one of us who is at all interested in educational questions is ready to admit that the practice of basing an estimate of historical knowledge on a simple examination

paper is futile. The idea of such an examination paper pretending to test the student's work throughout a whole year, or perhaps during a period of years, is not fair to the student, is not fair to the teacher. But the report of the conference of college professors recently held at Columbia College advocates that it may be possible to send in, to meet the college requirements, the note books, theses and other written work that has been done during the course of historical instruction at school, as a part of the evidence of historical knowledge of the candidate for entrance to college. It seems to me that nothing can be more excellent than this suggestion; but it should be made, it also seems to me, purely an optional measure. In some schools doubtless notebooks, the original thesis, or one or more of the original reports may be sent in and they may give evidence of excellent teaching in the schools, as well as of real knowledge on the part of the pupils. But there may be schools in which such means are impossible, and I would therefore be inclined to resist its being made compulsory that such notebooks or evidence of written work should be sent in. In that case it is necessary that the unfortunate individual on whom rests the task of accepting or rejecting students for entrance to college should read, as he does at present, entrance examination papers.

These are the main points I had intended to speak upon to you today. But there are two other things which I desire to touch upon. The one is the necessity of learning facts. After the few words which I said day before yesterday, one lady was kind enough to come up to me and say she was so thankful to me because I had mentioned the word fact as one of my corner stones. I always rigorously insist upon facts. It seems to me in America and other countries in which I have studied the educational question there is sometimes a disposition to overlook the importance of learning facts and try to impart knowledge as a sugar-coated pill. Now what is easy of acquiring is not really worth acquiring. A knowledge of facts, as a rule, is not easy to acquire. It is not that I want students to learn long statements by heart, but that as a basis of their work they must learn some definite facts. I have heard much since I have been in Buffalo at this interesting meeting, but the thing which seems to be made of chief importance—the chief thing impressed upon my mind—is that it is considered the duty of the teacher to make learning easy. I, for my own part, am inclined to think this may be pushed too far. I believe the road to knowledge has ever been rough; it can never be made an easy bicycle track. There is difficulty in acquiring knowledge; it is difficult to learn a long list of facts, but how is any one to acquire real knowledge upon any subject unless he takes the trouble to learn facts.



It is true that the duty of the educator is to teach the pupil how to think, that this is an important function in education and one that has been much neglected, but are we not going a little too far with the swing of the pendulum? Are we not devoting ourselves a little too much to worrying about how to teach children to think without giving them sufficient facts to support their correct thinking? Take the most brilliant writers, especially those who write leading articles in the newspapers, and how many times do we look through their productions and not find any facts upon which their inferences are based. The most brilliant thinking in the world will not supply the place of historical facts, and if these historical facts are not accurately stated the information is simply worthless, aye, worse than worthless, it is misleading.

Let me plead then for the secondary schools, and for that matter in the primary schools, that some attention should be paid to the actual teaching of facts. That in the primary schools, instead of writing what the teacher knows to be a legend or fairy tale, absolute facts should be taught. It is a duty we owe the child that he should learn early in life various things which will help him when he is older. How sad it is if their knowledge has no foundation in fact. Therefore it seems even in the earliest days, it might be possible to teach facts instead of theories and generalities.

The president very rightly reminds me that I have outrun my time, so let me conclude in general terms by testifying to the enthusiasm I find in your schools in America, and to the enlightened intelligence of your teachers, and add that it is not possible for me to tell you in words what an inspiration it is to a teacher coming from the other side of the Atlantic ocean to be received so kindly by this great body of representative teachers, assembled from all parts of the United States, to hear your words of wisdom and listen with profit to your views concerning methods.

In conclusion I want to say that the meeting of the American Historical Association meets in New York the 28th, 29th and 30th of December next. It is my hope that there will be set aside one session for the discussion of the methods of teaching history in colleges. If any of you are present in New York we will be glad to have you come into the discussion.

ENTRANCE REQUIREMENTS—THE CHICAGO SYSTEM.

BY PRESIDENT WILLIAM R. HARPER, UNIVERSITY OF CHICAGO.

I understand the question to be the standards of admission or rather the method of ascertaining how students have secured their training. The methods of determining whether or not the students are prepared to enter college. In the absence of the gentleman who had agreed to furnish a paper upon this question I am asked to say a few words with reference to what is called in the programme "A Chicago System." Four years ago we began our work in Chicago and in beginning we adopted the plan of Yale and Harvard. All persons admitted to the university were examined. This system has been maintained through the four years; no student has entered the university without an examination. The question then is not how the standard has been maintained, or with reference to the standard, but as to the methods of giving examinations. Our first system was the Yale system which Professor Seymour is to describe and which should have preceded this statement of mine. I will not enter into a full statement of the difficulties which presented themselves in the administration of the Yale system, as it will be presented to you. We found the necessity of coming into a closer connection with the teachers of the secondary schools.

There was on the other hand, the certificate system which had been adopted in one or another form in the universities of Michigan, Minnesota, Iowa, Illinois, and many other institutions. We investigated that system as closely as we were able to investigate it. We found, as we thought, many weaknesses in that system, so many, indeed, that by an overwhelming vote of our faculty the certificate system was not considered one which in our circumstances, we could adopt. Many of the arguments presented to us against the certificate system came from the institutions which had adopted it, confessing the weakness which they themselves had found. Naturally that raised the question whether, perhaps, something else was possible. It was then that the Yale system, with the other plan was adopted. That was something over a year ago, and it is now in use. The university has decided, first, that schools which have been visited and which have been found satisfactory, upon the whole, may be admitted into what is called co-operation. The university does not ask any school to enter into co-operation with it. If the school desires this privilege,

a petition comes from the school itself. When the petition is received, an officer of the university charged with this particular work is sent to visit that school. He spends at the school one, two, or three days, as the case may be, and on his return his report is filed. Another officer of the university a professor, is appointed to visit the school. He goes, and spends two or three and sometimes four days and on his return presents a most minute report of everything which he is able to discover in his examination. These two reports are placed together by a committee of the faculty, and if the reports are favorable the school is placed upon the co-operative list. It is understood that the "visitor" whom the university appoints will visit this particular school at least twice a year, and that another officer of the university will visit the school at least once a year. The school having been placed upon the co-operative list the procedure is as follows: Any teacher in that school may give examinations, the results of which will be accepted in lieu of the examinations given by the university itself. The university, at the same time, conducts its own examinations from its own papers. These are given at different places. The teacher in an approved school is permitted to forward to the departmental examiner a list of questions which are to be given to the class defining the subject,—let us call it a class in algebra. This set of questions is examined in detail by the departmental examiner. If it is regarded as of sufficient standard it is accepted. The paper is sent back to the teacher, through the principal of course. The students in that school who desire to do so, the students who are prepared for college, then write out the answers to these questions. The teacher takes the examination papers, and throws out the papers of all students who have not in his opinion passed. The other papers are forwarded to the university and read by the university reader. Marks are made and a record kept as if the examination were a university examination, and when this particular pupil has passed an examination on a sufficient number of subjects, as shown by the records of the university, he is received as a student in the university. The chief characteristic in the system is its individualism. It deals not with the school as a whole, as the certificate plan does, but it deals with each individual teacher. There may be ten teachers in a school, and out of the ten, three only may be permitted to send in papers that will be acceptable; the other seven may be rejected. Another characteristic of the system is that it brings the teacher into the closest possible connection with the university instructors in his or her department. It leads to correspondence with reference to what should be called for in the examination. It leads to a discussion of methods that should be em-

ployed. It leads to the discussion of questions relating to the scope of the course of study.

You will at once see that the burden which this plan lays upon the university is a heavy one. It is one which is costly, not only to the instructors, in time and energy, but to the university financially. The cost of providing men who will do this work, the cost of providing readers to read these papers is something very large. But it is believed that the results as they have shown themselves within this one year warrant the continuance of the plan. The plan is now in operation in something like fifty or sixty schools; the various high schools in the city of Chicago and the larger cities of the west and northwest have entered into the co-operation plan. While the number of papers received is as yet comparatively small, it is absolutely very large, so large, indeed, as to make the burden of the work very great. On the other hand we have found that the stimulus to the student in the secondary school was proportionately increased. The fact that his paper is to be read, not simply by his own teacher, but by others; the fact that the paper is to be read by those who are at a distance—and you know there is a suspicion on the part of many students in the high schools as well as colleges that their examination papers are not read; that the teachers do not burden themselves with the work of examining the papers, but that the records are made out on the basis of term work after all, serves as a very great incentive to the pupil in the preparation of his work in the course, as well as in the preparation of his examination papers. And more than this; there is the stimulus which is furnished the teacher. The teacher knows that his work, also, is to be inspected, if you please; that at all events it is to be examined, that the results are to be preserved at a distance; that if there are no results, or if these results are not satisfactory, this fact is going to be made known to the board of education of that particular school, or to the principal. This helps, and the influence of it has already been felt in many schools which have entered into this plan.

Whether or not this so called "Chicago System" is one which in its present form is the most desirable and will continue, no man can say. It is only fair to the system and to all concerned, to say that when the plan was finally adopted, it was adopted by a tie vote in the faculty, and the president cast the vote which determined its adoption. In other words, there was great doubt about it. It is also fair to say that of that minority of the faculty that voted against it at the time it was adopted, I suppose not more than 5 per cent. would vote against it today, because of the results which have already been accomplished in the year or more which have passed.

Can this system be applied to other institutions? It certainly could be adopted by state institutions. The greatest difficulty involved is the large amount of work which it throws upon the university. If the university wishes to do all that it can do to assist secondary education, if it has money which it may use in this way, personally I can conceive of no plan which would accomplish more with the same expenditure of money. I am thoroughly convinced after four years of careful examination that the old system of examination and the testing of the pupil's work simply by examination upon a particular day is unfair to many students. I am thoroughly convinced that the certificate system has in it weaknesses which must be remedied or the system must fall to the ground. It was with the desire of escaping the difficulties characteristic of both systems that we adopted what you may call a compromise system for determining whether or not a student was prepared to enter college. In the Yale system the teacher and pupil are not taken into consideration; the university determines for itself and by itself who shall come into the university and who shall stay out. By the Chicago system the teacher is given a part in the work of determining who shall enter, though I ought to add what I have omitted, namely, that the term grade of the pupil is forwarded in every case with the examination papers, and is taken into consideration in connection with the examination papers.

There are difficulties connected with the plan. One can conceive that the teacher desiring his pupils to pass might cram his pupils for a particular examination. This is possible, but such a thing could not continue long without being detected.

There is the difficulty of providing means for carrying on the work. It involves so much labor and so large an expense; but nothing good is to be obtained without expense and labor, and if this were the only objection, if other difficulties can be removed, it will be continued. We feel, those of us who have tried this plan for this short time, that it contains some elements which perhaps can be used in the great problem of bringing the university and the college into closer connection with the secondary schools. Personally I hope and believe the time will come when the institutions which maintain the higher standards, East and West, may agree upon one plan of admission; may agree upon the same standard, and may form an association by which persons who are to enter college shall have their fitness determined by one standard, by one method, so that the certificates from this committee or association in the hands of the student will secure him entrance to any university in this association. I believe this is entirely feasible. Whether our Eastern institutions will unite in such a plan I cannot say, but it is certainly feasible for the Western institu-

tions to form such an arrangement for themselves, the central institutions for themselves, and the Eastern institutions for themselves. Perhaps, further along, the time may come when all may unite.

The great hindrance to the progress of students in college is the step which must be taken between the secondary school and the college, and the greatest thing that can be said in favor of the certificate system is that the certificate system, with all its weaknesses, has made that step an easier one. When we realize how much these boys and girls have struggled in order to get forward, we ought not to multiply the machinery or utilize that which instead of helping them forward, makes entrance to the higher education more difficult.

I think I have expressed in the time I have, as fully as I can, the main outlines of the system. We do not regard this as a perfect system; we see difficulties already, but it has worked results which we could not achieve before and we believe it is a movement in the right direction.

ENTRANCE REQUIREMENTS OF YALE COLLEGE.

BY PROFESSOR THOMAS DAY SEYMOUR, YALE COLLEGE.

The entrance requirements of Yale College are determined by what this institution requires of its students after they are admitted to its privileges. Yale still agrees with Plato, in believing that one cannot easily find a system of education better than that which has been found by the long experience of the past, modified only (but sufficiently) to suit new conditions. Important modifications have been made of recent years in the curriculum of study at Yale, but every student of this college is required during his freshman year and (with a slight option) in his sophomore year to study Greek, Latin, mathematics, English, and French or German. Hence every candidate for admission to Yale college is examined as to his proficiency in these five departments. In general, he is not prepared to do satisfactorily the work of our freshman year unless he has studied carefully the equivalents of four books of Xenophon's *Anabasis* and three books of Homeric poems; half a dozen orations of Cicero, and about half of the works of Virgil; he must know well his algebra and plane geometry, being able to solve new geometrical problems, and must read French or German with fair ease. He must also have been trained in the study of English literature, and have some acquaintance with ancient history. Equivalents for particular set passages of Homer or Xenophon, of Virgil or Cicero, are accepted, but no other set of studies in place of any of those required. The proper study of Greek and Latin liter-

ature involves the study of Greek and Roman history. For our purposes of course then, German and English history could not take the place of Greek and Roman history, knowledge of which is required for a proper appreciation of the classical authors; still less could another language or physics or botany be substituted for either Greek or Latin. We endeavor to test the candidate's power in dealing with new material as well as his familiarity with what he has read; but we believe that true scholarship requires not simply cursory, but also exact and precise acquaintance with the text studied and are not ready to make the test of skill in translating passages hitherto unseen our sole criterion of the candidate's knowledge of Greek and Latin.

To a certain extent, our examinations are designed to be a test of culture. For instance, a student might be able to translate Livy or even Horace without having studied Virgil; but we think every one of our students ought to have studied Virgil, and hence we require it. Doubtless a student of good ability could do the work required in our English courses of freshman year without having received definite instruction and training in that subject in his preparatory course; but he can unquestionably do better work in that department if he has been properly drilled and taught both in the "Reading and Practice" and in the "Study and Practice" of English.

In the subjects named our requirements agree substantially with those of other New England colleges.

The Yale system of entrance requirements is thus seen to be simple and absolutely determined by the work of the first two years of the college course. Not many roads lead to our college work. Only one gate admits to Yale College. Those who desire a scientific or technical training, instead of a classical and liberal education, may apply for admission to another department of Yale University — the Sheffield Scientific School. The question, which of the two educations is superior, is not raised, but the two seem to us still to be different, and (being different) fitly both to demand different preparations and to receive different degrees.

The entrance requirements at Yale are maintained by an examination of every candidate for admission, "except in certain cases when a candidate brings evidence that he has spent the whole of a freshman year in good standing in another college." If such a candidate, from a reputable college, falls back a year in his college course we allow him to enter the freshman class without examination. We accept no other certificate of proficiency.

Since many (if not most) other colleges now admit students on certificate, perhaps the question may be asked, why Yale does not adopt that system. The subject is a large one, and I can only indi-

cate here some of the reasons which actuate us. The system of admission to college by certificate rests, manifestly, on the assumption of a sort of supervision of the school by the college. The college must know the quality and extent of the work of the school if it is to accept the school's statement that the candidate for the freshman class is ready to do the work required by the college. But the situation of Yale differs from that of any college which has adopted the system in question. Yale draws students from a wider field and from a larger number of schools than any other college in the country. In our last academic freshman class were young men from about 150 different widely scattered schools—men from Maine and from Texas, from Massachusetts and from California, from Oregon and from Macedonia. Our registrar tells me that about 250 schools have been represented in our classes within the last five years. Clearly Yale College cannot exercise any supervision over (or have exact knowledge of) all of these schools, and we cannot take students on probation into a freshman class of more than three hundred young men. To ascertain the character of a school by admitting its students on certificates in September and dropping them again from the class in January, is painful to the student and injurious to the work of the college.

We find, also, that many of the best schools do not care to take the responsibility of deciding which of their students shall not be admitted to our freshman class. This is particularly true of the teachers of private schools. They think that most boys are benefited rather than injured by the knowledge that their teacher is not the final arbiter of their destinies with regard to their admission to college, and are stimulated to good work by the prospect of the college examination.

I may add that some colleges which have admitted students on the certificate of the teacher are not wholly pleased with the system, and are now limiting it in several ways.

The conclusion of this matter is that since Yale examinations are planned to discover who are ready to enter upon the *Yale course of study*, we can hardly delegate this office to others, especially since our questions and our judgment of the answers are our most effectual means of indicating to boys and their teachers what preparation we desire and expect.

But in this connection I would say that we welcome the opinions and judgments of teachers as to the scholarship and characteristics of their pupils who are soon to be ours—but that any stereotyped certificate, stating no more than that the candidate is believed to be ready for the work of our freshman class, is of little worth to us. Such certificates are worth no more than formal certificates of charac-

ter, or signatures to an ordinary petition; but any information which will enable us to understand better the student as an individual, is of great value. The publication of our examination papers has diminished materially the percentage of rejected candidates. Teachers know now better than ever before what are the demands of Yale, and many a boy is advised that he is not yet prepared for our work, who a score of years ago would have tried the examination, only to be rejected. But unfortunately we cannot make perfectly distinct the standard on which the papers will be marked. Every teacher knows that 75 per cent in one school means more than 90 per cent in another, and to say that such or such a per cent of success would admit to Yale would be misleading. I need only to remind you further, that while some colleges prefer to set difficult papers and mark them leniently, Yale strongly prefers to set comparatively simple papers and require exact answers.

While we hold that examinations are necessary to test the proficiency of those who would enter Yale, we admit that these are a very unsatisfactory criterion. The examination is held at the close of June, and the weather is often oppressively hot. If the candidate takes the whole examination at once, he is engaged in writing under heavy mental pressure for sixteen hours, on twenty different papers, within two days and a half, which is surely a severe physical strain. Most of the candidates take the examination away from home, in the midst of strange surroundings; some of them are unused to written examinations with prompt collection of the work at the expiration of the time allotted; some are distracted by the unwonted scene, and by the presence of the other candidates; anxiety to succeed confuses others, and prevents them from stating what they know. Every year teachers come to our committee on examination, convinced that some pupil's paper has not been fairly marked, who on seeing what the boy wrote can say only that he did better in his examinations at school than in his examination for admission to college.

But in addition to the chance that the boy may not show just what he knows—the examiners, too, are fallible. They, too, are working in the heat of summer, and at the close of a year's toil. Even the setting of suitable papers is not a simple task. Many a passage in Greek or Latin seems to the instructor to be a good "average passage" for translation at sight, which yet proves too difficult or too easy to be a suitable test of the candidate's proficiency and powers. Many a problem of the mathematical papers is bound to be either harder or easier than the instructor expected. Some papers are so difficult that the examination books must be read leniently; while others are so easy that the books should be marked strictly. Errors

are possible even after the examination books are written. We can find no better examiners than our college officers; but these have been selected for their scholarship and their skill as teachers, not for their judgment and accuracy in marking examination papers, in which work very different powers are required. Most of their errors are of a kind not to be easily detected. If Samuel Jones' mark is interchanged with that of Samuel B. Jones, no indication of a mistake is left on the face of the record. Last year we had more than 750 candidates under examination; each (on the average) had more than twelve books; thus we had about 10,000 books to examine, and to record and consider the special mark of each. Some of these books were insufficiently identified by the candidates. Not a few poor fellows gave laborious answers to the questions, but failed to write their own names on the books which they presented, and thus caused perplexity to the examiners and trouble to themselves.

But at Yale we endeavor to take all reasonable precautions against error, and to make sure that if an error is committed it shall be in favor of the candidate.

In the first place we hold examinations in thirty-eight places, so that most of the candidates can present themselves at their own schools, or at least not far from their homes—without long journeys—and in smaller and less distracting companies than were formed when all were obliged to appear at New Haven.

Then, as for our own part of the work, our examination books in twenty different subjects are distributed by the committee to twenty different readers. Thus Professor Luquiens reads the French papers, Professor Cook the English, Professor C. H. Smith the books in Roman history, Professor Goodell those in Greek at Sight, etc. We thus avoid the chance that an examiner reading the books in several subjects might gain the impression that a candidate had done particularly well or ill, and make several of his marks unreasonably high or low. When seven different readers of Latin papers agree in marking a candidate low in Virgil, Cicero, Ovid, Cæsar, Latin composition, and the rest, the probability is strong that the young man is not ready in Latin to enter college. If a particular mark is surprisingly low the committee are apt to re-examine the paper. The subdivision of the examination into work on twenty different papers not only eliminates most of the personal equation of the examiner, but also increases the chances that the candidate will do himself justice on at least some of the papers. According to our present system no book in Greek, Latin or mathematics is rejected, except on the authority of a member of the committee in addition to that of the assigned reader, and the marks for the rejected books in English, French and German are

vouched for by experienced officers. The examination books are kept for several weeks, and are open to the inspection of the candidate or his teacher. All merely clerical work is carefully and elaborately verified and checked.

Thus our consciences are clear. We believe that our examinations, conducted with this care, are a reasonably fair test of the candidate's fitness to enter our freshman class.

About three-fourths of our candidates divide the examination into at least two parts, taking a "preliminary" examination in the more elementary of the required subjects one or two years before entering college. We give a so-called "preliminary certificate" when the candidate has shown himself to be prepared in at least six of the twenty required subjects. Clearly if a boy is able to pass our examination in only six subjects, he is not likely to be ready to enter college the next year. Hence he is allowed to present himself a second time to pass in at least six more subjects, and to receive an enlarged preliminary certificate. This division of the examination is a great mental and physical relief to the candidate, and follows the analogy of the abandonment of the old biennial examinations, to say nothing of the still older quadrennial examinations which were held immediately before graduation, on all the studies of the college course.

The permission to divide the entrance examination into two parts was granted by Yale first in 1882. Entrance examinations for Yale were held out of New Haven first in 1877, and in that year only in Chicago. The marked changes and alleviations of the last twenty years are obvious.

The question is often asked, what is done with the candidates who pass in most subjects but who fail to pass in certain others? These receive "conditions," *i. e.*, their securing full matriculation in the college is conditioned on their showing proficiency in the subjects in which they have been found to be deficient. These entrance conditions must be removed or "made up" either by excellence of work in the class-room or by passing an examination before entering sophomore year. We always urge the conditioned student to devote himself particularly to the work of the class-room, and by good recitations he can free himself from all conditions in Greek, Latin and mathematics.

Do you ask me with how many conditions is a candidate allowed to enter Yale? To this question no categorical answer can be given. Much depends upon the subjects in which the candidate is deficient. Cicero would count more than Cæsar, and perhaps either would be considered as more important than Roman history. Still more depends on the amount of the deficiency—whether it is slight or

equivalent to a failure. Thus four complete failures in, say Homer, Virgil, geometry, and German, may indicate that the candidate has a year's hard work to do before he is ready to enter college; while another candidate may be slightly deficient in seven subjects at the June examination, and yet by work during the summer may fit himself to join the class which enters in September. Much depends also on the health and maturity of the candidate and his general disposition towards study. Evidence on these latter points is always sought by the committee on entrance examinations. This committee is able to take into account the personal element in the candidate's case. The readers of examination books strive to mark with absolute impartiality, not heeding or knowing whether a candidate is young or old; just from his school work or "rusty" after two or three years in business, whether he is vigorous or out of good physical condition at the time of his examination, whether he is cool-headed or excitable—whether he has prepared himself or has been trained by a skilled teacher; but all these considerations may come fitly before the committee, and influence their decision with regard to the acceptance, rejection, or conditioning of a candidate.

Our system of entrance requirements is undergoing more or less important modifications. Doubtless we shall improve our methods of enforcing these requirements. We are working patiently on the problem. The Yale scheme for caring for her students is so elastic that we can care for all who come to us well prepared. Our desire is to admit all candidates who are fitted to do the work which the college requires. If the candidate is not ready to enter Yale, his own interests, as well as those of the college, demand that he should not be admitted at present. The identity of interest between the institution and the individual is so perfect that the committee on entrance examinations are not tempted to be "respecters of persons" or of schools.

We have seen, then, that the entrance requirements at Yale are determined by the required work of the college course; that they are enforced by an elaborate system of examinations held simultaneously in thirty-eight different places; that the teacher's judgment with regard to the candidate's personal characteristics and fitness for college work is sought, but is used as an auxiliary—not as rendering the examination needless. In the decision of doubtful cases, the judgment of a responsible teacher who knows the candidate's mental, moral and physical condition should (and does) have great weight.

NORMAL DEPARTMENT.

SECRETARY'S MINUTES.

FIRST SESSION.—WEDNESDAY, JULY 8, 1896.

The first session of the department was held in the City Library Building Buffalo, N. Y., at 3 p. m.

John W. Cook, of Normal, Ill., the President of the department, occupied the chair. Professor Washington Wilson, of California, was appointed to report the discussions of the session.

The first paper was given by Professor John W. Hall, School of Pedagogy, Buffalo, N. Y., upon "Dr. Rein's Practice School and its Lessons for American Schools."

The paper was discussed by Dr. Frank M. McMurry, Dean of the School of Pedagogy, Buffalo, N. Y.; Professor J. N. Wilkinson, State Normal School, Emporia, Kan.; and Professor C. C. Van Liew, State Normal University, Normal, Ill.

These speakers were closely questioned by many members of the department. General discussion followed.

Dr. R. G. Boone, Ypsilanti, Mich.; Professor J. Walter Barnes, Fairmount, W. Va.; Dr. Larkin Dunton, Boston, Mass., were appointed a committee to nominate officers for the year ensuing.

SECOND SESSION.—FRIDAY, JULY 10TH.

The second session was held at 3 p. m., in the Library Building, with President John W. Cook in the chair.

Professor J. W. Galbraith, State Normal School, Whitewater, Wis., was appointed to report the discussions of the session.

The following named persons were elected officers for the next year:

President, A. G. Boyden, Bridgewater, Mass.

Vice President, Z. X. Snyder, Greeley, Colo.

Secretary, E. A. Strong, Ypsilanti, Mich.

The committee appointed at Denver in 1895 made the following report:

MR. PRESIDENT, AND MEMBERS OF THE NORMAL DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION:

The committee appointed at the last meeting of this department one year ago in Denver to suggest some plan by which the normal schools of the country may be made more efficient, beg leave to make the following report:

- I. That there be inquiries (1) as to their control; (2) management; (3) maintenance; (4) variations that exist on account of geographical location; (5) course of study comprehending academic and professional work; (6) model or practice school; (7) kindergarten work; (8) their effect upon the public schools of the country; (9) recognition of diplomas in states other than the one in which issued; (10) the consideration of any other lines pertinent to the normal schools.

- II. Your committee recommends the appointment of a committee to make a printed report on the above to the Normal Department at its next annual meeting.
- III. The nature of such printed report to determine if it be of sufficient importance to present the matter to the General Association for a thorough investigation.

Respectfully Submitted,

Z. X. SNYDER, *Chairman*, Greeley, Colo.

N. C. SCHAEFFER, Harrisburg, Pa.

H. H. SEERLEY, Iowa.

Committee appointed to act upon the report of the committee, which was adopted, is as follows:

Z. X. Snyder, Greeley, Colo., *Chairman*.

Nathan C. Schaeffer, Harrisburg, Penn.

Homer H. Seerley, Cedar Falls, Iowa.

Edward T. Pierce, Los Angeles, Cal.

Miss Delia Lathrop Williams, Albany, N. Y.

Frank M. McMurry, Buffalo, N. Y.

Larkin Dunton, Boston, Mass.

Miss Marian Brown, New Orleans, La.

Dr. E. A. Sheldon, of Oswego, N. Y., presented a paper upon the subject "How Can a Practice School be Made to Answer the Purpose of a Good Public School?"

Dr. Sheldon was questioned at length by the teachers present. The questioning was followed by a general discussion.

Department adjourned *sine die*.

ALBERT G. BOYDEN, *Secretary*.

PAPERS AND DISCUSSIONS.

PROFESSOR REIN'S PRACTICE SCHOOL AT JENA AND ITS LESSONS FOR AMERICAN NORMAL SCHOOLS.

BY JOHN W. HALL, ASSISTANT PRINCIPAL OF THE FRANKLIN SCHOOL,
BUFFALO, NEW YORK.

Professor Rein's work at Jena is along two lines, a theoretical and a practical one. The first line, the theoretical, is carried out in the university proper where he lectures five hours a week, usually on two different lines of pedagogy; in one semester he lectures three hours a week on general didactics, and two on empirical psychology; in another semester, two hours a week on Herbart, three on systems of pedagogy; in a third, two hours on fundamentals of philosophical ethics; three on special didactics, etc. Thus far his position resembles that of Professor Hinsdale at Ann Arbor, or Professor Dewey at Chicago.

The second line of work, the practical, is done in the practice school, situated about a third of a mile from the university. The practice school consists of three classes of from twelve to fifteen boys each, from the poorer families. The boys enter usually in the first grade and continue through the eight school years. The present classes are the second, fifth and seventh grades, the youngest having entered one year ago last Easter. Each class is in charge of a critic teacher who devotes his whole attention to it, is present at every recitation, and does all teaching not done by the students.

This line of work resembles that of our best normal schools, being distinguished from them by the inferiority of the equipment, its insignificant appearance, and the class of people from which it draws its pupils.

The first, and perhaps the greatest distinguishing characteristic of the work that I have to mention, is the relationship that is established between the theoretical and practical lines just described. This relationship is brought about in three ways.

First, by the frequent visits of Professor Rein to the practice school—observing the work, offering friendly suggestions, frequently taking part in a recitation and sometimes conducting one entire. He, a university professor, is not only not afraid to engage in the actual

teaching of children, but he actually does it. In short, he is a practical man although a German Professor.

The second means of establishing this relationship is through the teaching of the students in the practice school. There the student strives to realize his theory in his practices. To do this he puts himself in closest touch with his critic teacher, and the class in the subject selected, by close observation and conference. Much time may be spent upon the preparation and discussion of his plan before he is allowed to go before the class. In this way he realizes the difference between talking about a recitation plan and actually making one which will stand the test — he appreciates the difference between talking about the aim of a recitation and finding and really stating it properly; between talking about preparing the mind for the reception of the new and actually framing the questions that will do the work. The plan being satisfactory he is permitted to take the class. He is led to see the imperfections of his recitation and to discover the causes. With this experience he prepares for his next recitation, each calling for two thorough and helpful criticisms, the one of the plan, the other of — the recitation.

The third means of contact, and by far the most important, is the so-called *Praktikum* or recitation for public criticism, and its criticism a few days later in what is called the *Konferenz*, to which an entire evening is devoted.

This recitation is held at the practice school in the presence of Professor Rein, the critic teachers, and the students — sometimes numbering over sixty. It is held by a student doing regular teaching or by a critic teacher, and is always one of a series — never an unrelated individual — never a show. The teacher who is to hold it is notified by Professor Rein a week in advance, and the plan is prepared with special care, for it is subject to inspection and criticism as well as the recitation itself. The chief critic is also appointed a week in advance, and begins at once to make himself thoroughly acquainted with that which he is to criticise in order to see the work in fitting perspective and distinguish between accidental mistakes and those indicating tendencies. His is a written criticism. The other students content themselves with notes on the recitation more or less copious.

The recitation is held the first of the week, but the criticism occurs at the *Konferenz* the latter part of the week in order to give plenty of time for its careful preparation. The written criticism forms the basis for the discussion, and attention is directed to the following points:

- I. A description of the recitation.
- II. Criticism of:—

1. Subject-matter, its fitness, its relation to other subjects, and its relation to that of the preceding and following recitations in the same subject.

2. Method: aim, movement, leading questions, tests, and summaries.

3. Results.

4. Government.

5. Manner.

The principal criticism is preceded by the reading of the self-criticism by the practitioner. In the preparation of the self-criticism it behooves the practitioner to keep in mind the old precept of the seminar: "Seek the error in thyself, not in the conditions, nor in the children." The actual time spent upon the discussion of the practice recitation is, on the average, two hours. Here it is determined how far the practitioner stands from his ideal. The judgment is softened by circumstances, but the discussion is as nearly scientific as possible. In the course of the semester such problems as the following come up time and again for discussion: Does the aim, as stated, fulfill the essentials of a good aim? Did the preparation of the minds for the new matter really prepare? Wherein was the failure? Did it make use of what the children had learned in certain other subjects? Is the step of preparation the proper place to emphasize correlation? What formal steps were involved? How? Were they violated? How? Was sufficient interest manifested? When and why was it lacking? The list might be continued indefinitely.

Again, and aside from this discussion of the recitation, the outline of work for the three classes in all subjects is read from week to week and suggestions or objections called for. Opportunity is given for criticism of any point in the general management, discipline, curriculum and method, or of anything done or not done in the whole field of their practice. Professor Rein presides at the *Konferenz*, and with exceptional tact controls the discussion. Direct attacks upon any practice or phase of the school is not only allowed but it is invited, for, in Professor Rein's own words: "We can conceive of criticism only from the standpoint of helpfulness, and as given only in aid of friends and fellow workers. Personalities underlying criticisms adjust themselves."

Thus, as has been shown, ample provision is made for bringing together the theoretical and the practical lines of work. Of these the practical, or that done in connection with the practice school, is by far the more important. It is in fact the very center of the educational activity at Jena. This, at least, is my feeling in the matter, and I have no doubt that the same feeling is entertained by Dr. Charles Mc-

Murry, Dr. Frank McMurry, by Dr. Van Liew, by the Americans now at Jena, and by all who have been seriously engaged there. On this point Professor Rein says: "The work in the schoolroom is and will remain the test for how much the educator must yet add to his inner treasures, first of knowledge, but above all of clearness, depth and warmth of moral sentiment. Let us conceive the work of our little practice school in this spirit. We are fortunate that we have it, small and modest as it is, for here we can separate the chaff from the wheat. Here is the field for the growth of character in the teacher who is willing to lessen the distance between himself and his ideal by unceasing effort, by deeds, rather than words. To him who is in earnest every criticism will be welcome, for criticism challenges self-examination and frightens one to greater safety."

What Professor Rein is striving for is, again in his words: "That each one acquire a pedagogical fundamental tendency; that it pervade his entire moral disposition; that he not only acquire such a tendency, but live it; that he shun all ostentation and place truth above everything even though it often be bitter."

This pedagogical fundamental tendency and the feeling, already described, that the students have toward the work in the practice school are the aims for the attainment of which American normal schools should strive. I do not profess to be an authority upon the present status of American normal schools.

If I am wrong in the following statements I am glad of it; but through conversation with men from many normal schools during the last few years I have been led to suspect that the feeling now in our normal schools is a desire to avoid work in the practice school as long as possible, and when in it to get out as soon as possible; that there is little feeling of self-confidence aroused in the student, in consequence of superficial and hasty criticisms; that the criticisms are made up largely of personal opinion and directed usually to mannerisms and devices; that this ends, too often, in the student striving only to please the critic teacher instead of trying to see in how far his work is in harmony with certain accepted fundamental principles.

Professor Rein avoids the above-named dangers in a large measure. He does this by making his practice school the center of his whole undertaking, and basing criticisms upon principles. That he does make it the center has already been shown. In general, I think the professors in our normal schools scarcely regard the practice school in this light; they exert little influence upon it, and receive little benefit therefrom. Indeed, the normal professor is seldom in the practice school making suggestions, seeing that the methods there used are in harmony with his own, or conducting recitations for criti-

cal discussion. As a result of this lack of acquaintance the professors and the critic teachers cannot supplement each other's work as they should—they even go in opposite directions. In consequence of this same fault it is possible, it is possible, I say, that in the selection of subject-matter, for example, in the drawing in one department of the school the emphasis may be laid upon the thought which the drawing is to represent; in which case the sequence of topics is determined by something outside of the subject-matter; while in the other department the emphasis may be laid upon the logical sequence in the subject-matter itself—principles directly opposed to each other.

Again: In geography, in one department juxtaposition in space may be insisted upon as determining the sequence of topics, while in the other it is required that the causal notion shall bring the topics along in so-called geographic units—two ideas absolutely incompatible. In science, interesting relationships are insisted upon in one department of the school to determine the sequence of topics; while in the other it is demanded that the logical, scientific classification shall determine it.

Even in psychology and pedagogy the bearing of the work in the normal school and practice school upon each other is too often too difficult to discover.

I am not prepared to say how nearly I have described the real state of affairs in our normal schools; but in the same degree that I have succeeded, the departing student carries away—in inverse ratio—insight into a few guiding principles for his future activity, where he must be helped over rough places largely by recalling what his favorite professor did under similar circumstances.

In contrast with this state of affairs the work at Jena may be considered as a type of what normal schools should be. In this case Professor Rein would stand as a type for normal school faculties; his university work—its systematic arrangement, quality and thoroughness would represent the professional theory of the faculty; his practice school, *i. e.*, the importance of the position assigned to it would be a type of the position and importance which a practice school should hold.

Let us see now what we should find in a normal school represented by such a type.

1. The model school would be the prominent feature of it—the center of all professional activity—for professor as well as student—the testing laboratory for all pedagogical theory. The professor himself would probably teach there, illustrating the method of his specialty, perhaps holding a recitation with children occasionally for critical discussion.

2. The actual recitation would be an object of the closest study.

Criticism would be based upon principles. Personal opinion would play a small part. Detailed plans for each recitation would be required. All work would be closely related to the pedagogical theory expounded in the normal school.

3. We should find that the professors of method, pedagogy and psychology were very zealous in seeing that the principles taught are not violated in practice, especially not in the practice school, nor even in the normal class-room of their co-laborers without a protest.

4. We should find the entire school a unit—a living unit—in its pedagogical thinking. The principal of the practice school, the professor of methods, the critic teachers, and those professors doing critic work would for the best results necessarily stand upon the same pedagogical principles.

5. We should, therefore, probably find a system of ideas on teaching, *i. e.*, there would be certain fundamental laws agreed upon, accepted, and as far as possible lived up to by the entire faculty. This would necessitate the acceptance of certain ethical notions upon which the aim is based. There would be agreements as to the means of attaining the aim, based upon acknowledged laws of the developing mind and body. There would be a systematized body of pedagogical thought. In other words, there would be a system of pedagogy of some kind—not a lot of dogma, but working hypotheses—always, of course, with perfect liberty to all to disapprove them, for under no other conditions can one be justified in assuming their truth for purposes of action.

In a normal school of this type we would find the aim to have each student put in possession of a well-organized body of pedagogical thought, and that it, being worthy of being lived, be lived.

We would find the practice school as prominent in the professional department as the chemical laboratory is in the department of natural sciences. We would find the professors of all departments observing frequently in it, and making their own methods and those of the practice school harmonize with each other.

We would find all instruction in normal and practice school based upon accepted laws underlying method.

We would find harmony of pedagogical thought throughout the entire institution, so far as essentials are concerned—*i. e.*, we slowly would find the whole an institution for the working out of some pedagogical system.

Whether or not the American normal schools belong to this type you know better than I. Whether or not it is possible for them to reach this ideal, you are also the better judge. But in affirming that it is desirable for them to attain to this ideal I am sure that I do not stand alone.

DISCUSSION.

PROFESSOR J. N. WILKINSON, State Normal School, Emporia, Kan.—It is not profitable for this discussion to devote itself to presenting the points in which the Jena practice school could be improved. Even some of the best of the many good things found there could not be incorporated bodily into our American normal schools. The visitor finds much more to adapt than he does to adopt. Many of the adverse conditions are the result of necessity and not of preference. While, as reported in the paper, the equipment of this school is stunted by lack of funds, the furniture and illustrative material are, nevertheless, remarkably well adapted to the purposes of the school. The plain unvarnished seats and desks are better suited to school work than the handsome desks in American city schools and normal schools. The devices and material for class instruction show that the interested efforts of genuine teachers accomplish better results than even the well-paid services of mechanics and publishers.

The critic teacher's habit of interrupting the pupil teacher at any point in the recitation where he thinks help is needed strikes the American training teacher as discourteous and likely to destroy the confidence of the children. American children would certainly carry a very damaging report to their home concerning any such proceeding. During the most vigorous interruption by the critic teacher, the children of the Jena practice school must keep their eyes fixed on the pupil teacher, and must answer, without turning, whatever questions may come from the critic teacher sitting behind them. When the critic teacher has carried the recitation to a point where the pupil teacher feels sure of his ground the subordinate breaks in on his superior's discussion without waiting for so much as a look of permission. The children in Dr. Rein's practice school are much more thoroughly under the control of the school than would be possible in any practice school in America. It costs their parents less to send them to this school than it does to an ordinary public school, and there is less danger of the child's being withdrawn from school than there would be with us. Free tuition and free books and stationery to children in American training schools would do much to give the hold on pupils that such a school should have.

Not all who are taking Dr. Rein's course in pedagogics are permitted or required to do actual teaching. While there are many nationalities represented in the seminar, the Americans do more teaching than is done by any others not native Germans. Perhaps the teaching is entrusted to those who are most anxious to do it, which would not necessarily be those who should do it. The paper does not overstate the willingness with which practice teachers engage in the work entrusted to them. They receive for this work no credits or other advantage looking to a degree from the University. The teaching is done with that freedom from selfishness that is most favorable to the highest success. The large amount of time given by the over-teacher, and especially by the head over-teacher, would surely demand and receive some remuneration in American normal schools, with our present ideas of the fitness of things. We can certainly do well for our training departments by adapting that over-teacher organization in such a way as to give our strongest pupil teachers special training and such provision as will best fit them for principalships and superintendencies.

The *Praktikum* which is the one recitation per week most carefully prepared,

closely criticised and fully discussed, can hardly be taken as a sample of the entire work of the school, however much it may be presented as a model for us. This is the only recitation at which the teacher is sure of observers, although it is supposed that the over-teacher in charge of the class will attend every one of its recitations. The over-teacher knows, however, that the *Praktikum* is the occasion that will most thoroughly put his work to the test. He shares with the teacher the responsibility for the plan, and he expects to sit with the teacher at the *Konferenz*, and help defend and explain their work. The tests applied at the *Praktikum* are most searching.

For instance, some one keeps the record of the number of questions asked each pupil and the number correctly answered, the number of times each pupil offers to answer and the number of correct and incorrect answers given by him when allowed to answer. All the members of the seminar are expected to give their undivided attention to every *Praktikum*, and on the second night thereafter to join in two hours of discussion on the recitation at the *Konferenz*. They make a review of its philosophical and practical bearings such as we have not found hitherto in America. As to adopting Professor Rein's plans in this country, it must be remembered that the conditions are very different in our normal schools from those in this little seminar of an old German university. It is wise to urge, as does the paper, that our normal faculties should unify their work around the practice school, but we cannot hope for such a centering of all interests around every recitation here as is possible with the one crucial test recitation per week at Jena.

We hail with satisfaction the attempt made in Buffalo by the author of this paper and those with whom he works to introduce more of Dr. Rein's methods than is found in other American practice schools. There is no room to doubt that all who study carefully the lessons to be learned from Dr. Rein may get many valuable suggestions. While revolution is not feasible nor desirable in our training schools, there is great need of an evolution which will find its chief element in the work of the seminar at Jena.

THE PRACTICE SCHOOL AS A PUBLIC SCHOOL.

BY DR. E. A. SHELDON, PRINCIPAL STATE NORMAL SCHOOL,
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"How Can a Practice School be made to Answer the Purpose of a Good Public School," is the question we are asked to discuss this afternoon.

A very common opinion is that the children in such a school are necessarily sacrificed to the interests of the pupils in training. While there is some ground for such an impression, the objection is less serious than might, at first thought appear, provided all the conditions are what they ought to be.

In the first place, the pupils in training should have the most careful preparation before they enter the practice school.

This means, first, an exhaustive knowledge of the subjects to be

taught—such a mastery of the branches as is essential to those who have to teach them. This means more than is necessarily required of ordinary students, those who are preparing for other avocations. Teachers should understand the underlying principles of every subject they have to teach, the relation that exists between the different subjects, and the parts of each subject; the reason for every step taken, and should make the matter to be taught so thoroughly their own as to be quite independent of any text-book on the subject. They should, in fact, be able to make their own text-books.

In the second place, the pupils in training should have a thorough knowledge of the children to be taught. This means a careful, systematic study of children. How can one who does not understand children be expected to train them, to form them into beautiful, noble manhood? You might as well expect the sculptor to construct a statue, to be admired by all beholders, from material of the texture of which he is ignorant. Without this knowledge of children, teachers are sure to make serious and far-reaching mistakes. It is of vital importance, then, that this part of their preparation should be conducted with the greatest care. It implies much study of children of all ages under the guiding hand of the most skillful investigators.

In the third place, they should have a clear understanding as to the use to be made of the means employed in the training of the children. This implies a clear apprehension of educational principles and their applications in teaching. In this part of the training mere theories are not sufficient. At every step there should be a practical, objective application of the principles. Classes of children must be brought in and taught in the presence of the pupils in training, first, by a skilled teacher, and then by a member of the class, the teaching to be followed by criticism and discussion. These criticism lessons should be conducted with the greatest care and thoroughness. If given by the critic or method teacher, the object and plan of the lesson should be fully explained to the class in training. They will then be able to see whether and how the object is attained and the plan executed. Notes of the lesson should be taken at the time and on subsequent days criticism should be given and the lesson fully discussed. If the lesson is given by a member of the class in training, it should be on a lesson previously assigned by the method teacher. In this case the object and plan of the lesson should be fully written out by the pupil in training, and submitted to the method teacher for criticism and suggestion. This plan should be given to the class in training at the time the lesson is given that they may the better be able to judge as to the completeness of its execution. The criticisms on the lesson whether given by the method teacher or a pupil should be care-

fully prepared, usually written out and presented on subsequent occasions. The summary of the criticisms should be done by the method teacher, after an opportunity has been given by the lesson giver to answer for himself. All criticisms should be based upon educational principles well understood. The reason for every step taken should be required. The lesson, in fact, should be an elucidation of such principles.

After the preparation now indicated, in the knowledge of the subjects to be taught, in a knowledge of the children to be trained, and in the knowledge of the fundamental principles of education and their practical applications in teaching the various branches of study—the pupils in training may be introduced into the practice school as teachers, and most emphatically, not until the end of such a course should they be allowed to tamper with the children. To allow novices who have not been thus prepared to enter the practice school as teachers is harmful to the children, and should never be tolerated. At the end of their courses in child study and methods, and not before, they may go to the practice school, at first as observers, preparatory to their work as teachers, and at the proper time they may be fully inaugurated as teachers of classes.

Detailed plans of work in every subject should be submitted by the pupil teachers to the head critic or superintendent of the practice school for criticism and suggestion. These outlines should be presented at the end of each week for the following week. This implies an understanding on the part of the pupil teachers of a proper relation of subjects, a knowledge essential to the success of teaching related branches. They ought to understand the principles on which courses of studies should be arranged, and be able to frame such courses. Without such knowledge, they will hardly be able properly to arrange these weekly plans.

With the careful preparation indicated, under the guidance of wise and capable critics, the children are not likely to suffer seriously at the hands of the pupil teachers.

In the state normal schools of New York the time given to special professional preparation, after the scholastic knowledge of the branches has been completed, is five months. This is too short a time by one half. A full year at least, should be given to it by pupils such as we find ordinarily entering our normal schools. This would give opportunity for a wider range of application of principles, as also of instruction in the theories and history of education. By this time the pupils will, naturally, have reached the age of nineteen or twenty, and have gained that mature judgment so essential to the teacher.

The school of practice should be so arranged that each pupil

teacher may have a separate room which may be closed against all unnecessary intrusion or interruption of any kind, where he may rule supreme and execute his own ideas in his own way. It should be emphatically his own school to organize, to govern, and to teach. It is only under such conditions that he can do his best work and that his skill and power as a teacher can be properly tested and developed.

Lesson-giving is by no means the most important part of the teacher's work. To arouse and develop the moral elements, to get into sympathy with the children, to get a strong hold of their inner life and strengthen the moral character so that it becomes self-poised and self-controlled, is far more than ability to give a good lesson. This can only be done where the teacher has his own children in his own room, to manage in his own way, without unnecessary interference. Realizing his responsibility and his freedom, if he possesses the power requisite for the teacher, he will prove himself equal to the situation and do his work acceptably. If it be again objected that the children are liable to suffer in the hands of novices, with no teacher of experience to direct and control, I would ask is it not possible that the inexperienced teacher, uncertain as to his ability to do the right thing in the right way, conscious of the presence of one whose business it is to size up and express in a permanent record his teaching qualities, may fail to do his best work? Cannot some of us appeal to our own experience in answering this question? Is not a sensitive nature likely to become excessively self-conscious under such conditions and so greatly weaken his powers to do what he is capable of doing if left to himself? If this inference is a correct one, then so far as the teaching goes, the interests of the children, as well as the teacher, would be best served by leaving the teacher largely to himself; so far as the control of the class is concerned, if the teacher is weak in this direction, something may be gained for the children by the presence of the critic, but, at the same time, you may take away one of the most important factors in the training of the teacher. If you take away all opportunity for testing his ability to govern a school, he can get no growth in this direction, and you have failed to train the teacher in that which is most essential to his success and usefulness, and, without knowing it, you may turn out upon the public an incompetent teacher. It is, perhaps, in this matter of discipline more than in any other, that the teacher is likely to fail, and needs the most careful training.

By this we do not intend to imply that no suggestions or criticisms are to be offered to the pupil in training. The most competent critics should have supervision. Their duty is to outline the work, see that all parts are suitably related, and that their work is properly accomplished. The execution of the work, however, in all details of plan and

method should be left to the ingenuity, skill, and individuality of the pupil. In this way, all the records, all the movements, all the management, all the government, as well as all the teaching, are entrusted to the pupil teachers. Here is the place for them to learn to do all that they will have to do when they come to assume the entire responsibility of schools of their own.

This brings us to the consideration of the critics; the value of a school of practice must depend very largely on their skill and ability. They must have had large experience as teachers, must have a thorough knowledge of educational principles, must understand human nature and the art of criticism. To insure success all these qualifications must be combined in one person, whose mission it is to build up and strengthen the pupils in training.

The first business of a critic is to find out what is good in the pupil teacher and to lend all the encouragement that is possible. At first very little adverse criticism is to be offered. For the first few days after he is installed in his school he had better be left largely to himself to work out his own salvation. As the critic makes occasional visits to his room, he should be careful to make himself as unobtrusive as possible. He should be an observer and a helper, rather than a superior teacher and a fault-finder. He should make his presence felt as little as possible either by the teacher or the children. At a proper time, never in the presence of the children, in a quiet, friendly way, that cannot give offense, but on the contrary that will appeal to the gratitude of the pupil teacher, he calls attention to some marked defect, always prefacing the adverse criticism by commending some special excellence. Something may be found that is good in every one, and it is well that the critic keep before the mind of the pupil some of his good points, rather than only that which is bad. He must ever be mindful that his work is to build up and strengthen, rather than to tear down and destroy. To this end an ounce of commendation is worth a pound of condemnation.

The frequency of the visits of the critic in any given room must depend on circumstances. The judgment of the wise critic will decide this. Under peculiar conditions it may be advisable that these visits be repeated every day, or possibly several times a day, while under different conditions it may be better that several days should intervene. A mistaken notion sometimes prevails that there is no improvement in the absence of criticism. On the contrary, growth not only goes on in the absence of any criticism whatever, but under certain conditions criticism becomes absolutely harmful. Just as soon as the pupil becomes self-conscious of a fault and is trying to break it up, the less you interfere with him the better. When he arrives at

this stage of consciousness, when he realizes a fault every time he falls into it, criticism becomes an annoyance—a positive hindrance to growth. In such a case it is better to let him alone—he will work out his own salvation. This is the time to drop all criticism of this particular fault and leave it to take care of itself. Another fault may now be taken up and treated in like manner, and so, in order of their prominence, the weak points may be taken up and eliminated. To take up too many faults at once tends to confuse and dishearten. If you break down the confidence of the pupil in himself, all is lost. I have said that these criticisms should be personal and private. This includes all faults that are individual in their character. More general faults that pertain to the class as a whole may be discussed in the presence of all. Meetings for this purpose should be held at the end of the day's work.

If the pupil teacher shows decided signs of weakness in control, in questioning, in general skill, or in any other vital point, the critic may arrange to take the class for a day or two while he looks on, or the class may be assigned to some other pupil teacher while he takes a little time for observation under the direction of the critic to whom he makes daily reports of his observations. After a short period of such observation he may be returned to his class, or under peculiar circumstances it may be better that he should be assigned to a new class, that he may have an entirely new deal. After repeated trials and failures, the time may come at last, hard though it may seem to be, that the effort to be a teacher should be discouraged, and some different calling recommended. Too much experimenting with a weak teacher, at the expense of the children, and we may add at the expense of himself, is not wise. Such a person had better turn to some calling where success is less problematical, and where less loss to others is involved. The product of a normal school ought, beyond all question, to be a good teacher. If the normal school does not sift out the poor material, and so protect the public from incompetent and inefficient teachers, it has no right to a place in our school systems.

For thirty-five years the plan I have outlined has been employed in the Oswego school under circumstances that are calculated to test its efficiency. The school of practice is, and always has been, one of the public schools of Oswego, subject to the same supervision and tests as the other schools of like grade, and it has always sustained itself honorably and taken high rank in comparison with these schools. None but graduates of the normal school are employed in these schools, so that the test has been somewhat severe, all certainly that could reasonably be demanded. The school is not located where the children are drawn from the best homes. They are mostly the child-

ren of the poorer classes, principally those of day laborers and foreigners.

I have yet to be convinced that a better plan for organizing a school of practice can be devised. Where tuitions are received, parents are likely to feel that they have a right to dictate as to how and what their children shall be taught and the way in which they are to be treated. In the public school they expect to abide by the rules of the governing board, without question. In such a school, too, it is possible to regulate the number of children to the necessities of the training school. Where the school is dependent upon tuitions, it may be found difficult to secure a sufficient number of children to give proper opportunities for practice in teaching. The pupil teacher should have not less than fifteen to twenty pupils in his class, and he should have them continuously for a period of not less than ten weeks, when he may change and take a similar class but of a different grade for a like period of time. Such an arrangement is hardly found practicable where the school of practice is sustained by tuitions. It is also difficult to carry out this plan where large numbers are in attendance in the normal school. It is hardly possible to do thorough, efficient work in a school of practice where the attendance in the normal department is more than four hundred. As our normal schools are ordinarily organized, giving instruction in both subject-matter and method, a normal school with an average attendance of four hundred pupils should have a school of practice attached containing not less than four hundred children of all grades below the high school. I say below the high school, for very few of our state normal schools afford that extended and thorough preparation in all the branches of study required in the best schools of this grade. This is particularly true of the sciences and foreign and ancient languages. For teachers in these branches we must depend, for the present at least, upon the colleges and universities. It is preposterous to set up the claim of preparing teachers to teach any science in twenty weeks, or any language in two or three years, and this is the ordinary time given to these subjects in most of our normal schools.

I have suggested that the time given to what may be strictly professional preparation should be not less than one year. I believe the time for practice in teaching should not be less than the time devoted to method. No part of the work is so important as the teaching under criticism. The value of this part of the preparation should always be emphasized and given its full share of attention. With a thorough preparation in subject-matter, with one year given to a discussion of educational principles and their practical application in teaching, and one year to teaching under criticism, with no division

of time between studying branches and teaching, we may hope to turn out teachers fairly qualified for their work. I am aware that the time suggested for professional work is more than that ordinarily given, but at the same time I am very well satisfied that it is no more than is demanded to equip the teacher properly for his work. With the preparations and organization suggested I believe it possible to do good work for the pupils in training, and without doing any injustice to the children composing the school of practice.

The plan supposes a well-organized force of capable critics, not less than five or six, with a superintendent at the head.

In the outline here presented I am sure too much is not demanded, and anything short of this must end in partial failure.

I wish to add, in closing, that to call a school of practice a "model school" is a misnomer and misleading. Under the conditions supposed it is not possible to make it a model of excellence, but that it can be made equal to the average public school has been proven beyond the shadow of a doubt, and this, it seems to us, is all that can be demanded. Novices are more or less employed now in the public schools, and it stands to reason that they are not likely to do better than the teachers in training who are under the supervision and direction of the most competent critics that can be obtained, and who, under the most favorable conditions possible, are given every needed facility for instruction and illustration. They have the backing of those who stand ready to give them every necessary moral support. They have the advice and suggestion of the most excellent teachers, and cannot get far astray or fail in any very serious way for any considerable length of time. They have had the best previous preparation in subject-matter and the methods of teaching obtainable, go to their work with fresh and admirable equipment, and are now put on their mettle. Their graduation and endorsement depend on their success in the school of practice. Under such conditions they are likely to do their best work, and the children are not likely to suffer seriously at their hands.

It would be a very good plan to have in connection with every school of practice model schools of different grades to be used only as schools of observation. In such schools none but the best teachers should be employed and every desirable facility afforded for the best work possible. Such schools would be very serviceable but could never be substituted for a school of practice.

I ought perhaps to add, although it appeals at once to the good sense of every person, that a normal school should be a unit in all departments of its work. There should be a mutual understanding and agreement as to the general principles that underlie all educational

work, by all the members of the faculty, and the application of these principles should be clearly manifested in the teaching of all subjects by every teacher in all departments of the school. The school should have a character of its own, so pronounced both as to its spirit and method of work as to be apparent to the casual observer. This can only be brought about by a discussion of educational principles in faculty meetings, with a practical application of the same in lessons to be given in the presence of the faculty, to be followed by exhaustive criticisms. The result of such discussions and criticisms should be the substantial agreement on the part of all the members of the faculty on all fundamental educational principles, and the ability to apply them in all their class work, whether in the teaching of subject-matter, or method, or criticism.

DISCUSSION.

[Reported by Professor W. J. Galbraith, State Normal School, Whitewater, Wis.]

MISS ISABELLE LAWRENCE, Superintendent of Training Department, State Normal School, St. Cloud, Minn.—“The essential unit of all teaching is the child; the child's interests. In teaching how to teach this must still be the essential unit. If the training teacher has the interests of the pupil teacher mainly in view, the pupil teacher will also consider her own success her main object. All enthusiastic love of children; all true work from the right standpoint, will thus be included. But how can teachers learn to do their work without injury to the children? There should be a classification of the mistakes made in teaching by the pupil teacher. On the one side, a misconception of the child will injure the child; the wrong method pursued habitually with the child will injure the child. Such injury to the child should never be allowed. Not alone should false work of this kind be prevented because of the children, but also because of the pupil teacher. Teaching wrong will not help a teacher to teach right. Hence, all blundering of this kind must be stopped. On the other hand, the mistakes of awkwardness incidentally made by a teacher who sees his problem but who lacks experience will not injure the child. I do not believe that the chances of injury to children in a practice school, where critic teacher and pupil teachers and the entire faculty of the normal school are studying the individual pupil and are ready to criticise wrong methods, are as great as they are in the average public schools.”

At the conclusion of Miss Lawrence's remarks, the chairman gave the members of the section an opportunity to ask Dr. Sheldon such questions as were raised in their minds by the paper.

MISS STRONG, Brooklyn, N. Y.—Q. Is the critic teacher the methods teacher?

A. Not necessarily.

Q. Are the classes always in the hands of pupil teachers?

A. Yes.

Q. Does the critic teacher control the work of the class?

A. The critic teacher and the pupil teacher discuss and direct the work jointly.

Q. In Brooklyn, methods teachers do not teach classes. How are we to find places for 120 pupil teachers?

A. I do not know. A partial solution would be to make branch training schools.

Q. In Brooklyn we need 700 teachers; how are we to provide them?

A. Have seven times as many training schools. We attempt to train too many, nevertheless the training school is the essential part of an effective normal school.

PRINCIPAL HUSTED, of Albany, N. Y. —Q. Is promotion determined upon the judgments of the pupil teacher, or by the critic teacher?

A. By both.

Q. Are promotions determined by examination?

A. Not by formal examinations. Final determination of the whole matter is in the hands of the critic teacher.

MISS COOK, Chicago Normal School.—Q. Why not allow the critic teacher to have charge of the children for a part of the day?

A. I prefer to have the pupil teacher have and feel the full responsibility of the work. I believe in observation, but it should precede this work. The critic teacher must not aid the pupil teacher in such a way as to remove or divide the responsibility.

PRINCIPAL NOSS.—Q. Does the pupil teacher have continuous charge of the children?

A. She is supposed to. It is sometimes necessary to change, however.

Q. Is there any objection to having critic teachers take charge of the class at times, pupil teachers observing?

A. Yes; to the extent that you take away responsibility, you defeat the legitimate ends of practice work.

PRINCIPAL WILLIAM E. WILSON, State Normal School, Providence, R. I.—Q. In our school critic teachers have charge of the classes each Wednesday; this gives an opportunity for observation of expert work. Will Dr. Sheldon tell us how he prepares his pupil teachers for practice work?

A. Classes of children are brought before the students in the methods class, and the members of the methods class are encouraged to visit certain practice work.

Q. Whence are these children brought?

A. They are drawn from the school of practice.

Q. Do pupil teachers do model work?

A. No; the name model school should never be applied to the practice school.

PRESIDENT WALTER L. HERVEY, Teachers' College, New York City.—Q. What proportion of the year are the children in the hands of pupil teachers?

A. The whole time.

PRINCIPAL HARLAN, Wilmington, N. Y.—Q. How many teachers other than pupil teachers have you in your training school?

A. Five.

MRS. FRANK S. PARKER, Chicago Normal School.—Q. Is there a tendency to make pupil teachers copies of critic teachers?

A. I cannot say that there is; it is exceedingly unfortunate if it does have that tendency.

Q. How many lessons would the prospective pupil teacher witness during her preparation for actual practice work?

A. One or two lessons each day for five months.

MISS MARIAN BROWN, New Orleans Normal School.—As a pupil of Dr. Sheldon's I can say that pupils do not imitate.

PRINCIPAL FRANCIS J. CHENEY, Cortland Normal School.—Q. Do you believe in "the method?"

A. I do not; there are eternal principles, however.

PRINCIPAL SNYDER, State Normal School of Colorado.—Q. Do your patrons complain that their pupils are being practiced on?

A. No; thirty-five years ago there was some such complaint.

PRINCIPAL HUSTED.—Q. If pupil teachers do not imitate why observe at all?

A. We observe in order that we may be original.

MISS RICE, New Jersey.—Q. Are not normal schools to present to us exemplary teachers and model teaching?

A. Our pupils must not be encouraged to imitate; each should do his own work in his own way.

SUPERINTENDENT GILMAN C. FISHER, Pawtucket, R. I.—Q. What grades are represented in your schools?

A. Including the kindergarten, ten.

PRESIDENT GEORGE R. KLEEGER, St. Cloud, Minn.—Q. What is the relation of the normal school to the practice school?

A. The normal school has control of the administration of the practice school.

Q. Who pays the expenses?

A. The expenses are divided between the city and the normal school.

Q. Who determines the course of study for practice school?

A. The principal of the normal school.

Q. What assurance have you of the continuance of the present relation?

A. None, other than that it has continued for thirty-five years.

SUPERINTENDENT EUGENE BOUTON, Pittsfield, Mass.—Q. What is the relative value of a training school where the pupil teacher has the entire control and where there is a teacher in charge?

A. As I have said before I do not like to have a teacher in charge; it weakens responsibility. A city training school may be as successful as a normal school.

At this point the paper was opened for formal discussion.

DISCUSSION.

PROFESSOR J. N. WILKINSON, State Normal School, Emporia, Kan.—As to confining the observation work of pupil teachers to the model school entirely, where they see none but the best of teaching, there may be some consolation for those of us who are not able to present enough model work to make this possible. A successful blacksmith is reported to have said that he had received as much help in other shops from seeing how not to do as from seeing how to do.

The pupil teacher should not be led to depend upon imitation. If he has wise guidance, he will discriminate between the excellent and the inferior work of those he observes. He will feel greater freedom in questioning the work of an equal than in suggesting possible faults of a superior. It is probable that a greater amount of faulty work may pass without question when done by a model teacher than would be accepted from any pupil teacher. There may be greater danger in the harmful imitation of the few faults of a model teacher than of even a few of the many faults of the pupil teacher. There is a tendency on the part of children to become too self-conscious while they do the work of the school, and this tendency is liable to be most marked in the pupils who receive all their teaching in the presence of many observers. The model teacher will not fail to show the pupils that she is thinking much about how the work of the class appears to the observers.

While the paper has described in the most instructive manner the using of the city public school as a practice school, it still remains a question of great concern in comparing practice schools with the typical public schools, whether the practice school can do as well for the children who attend it as can the public school. The frequent change of teachers seems to be a necessary evil of the practice school. The teacher who spends but a short time with his class cannot make the impression upon character which is among the best results of good teaching. With this thought comes the reflection that sometimes, in the ordinary public school, the fact of long continuance in the sole charge of one teacher has a very damaging effect upon the young people. It may be doubted, however, whether even the best results for the pupil teacher demand as frequent changes as some of us make. The teacher should stay with the same class long enough to make a very perceptible growth. The continual transplanting of cabbages is not likely to grow very good heads. The transferring of a teacher before he has been with a class as much as ten weeks should be made only in case of absolute necessity. It is not necessary that each pupil teacher should be tried in every subject or in every grade, but on the other hand it is not wise that any one preparing to teach in the ordinary public school should take all his training department practice in a favorite subject or in the grade most to his taste. There is, for pupils in the training department, some compensation for the loss caused by frequent change of teachers, in the fact that training school pupils get a considerable sharpening of their wits in acquiring their very remarkable power of estimating new teachers, and their phenomenal skill in showing the new comer that he must learn to govern as well as to teach.

There are many points in which the work of the pupil teacher may compare favorably with that of the teacher in the city schools. The average teaching ability of normal seniors is as high as that of the rank and file of public school teachers. The experience of normal seniors in ordinary school work is as extensive as the average of teachers in the public schools. The normal students of the West are chiefly those who have taught long enough before coming to the normal school to determine that they have some fitness for teaching which makes it worth while to invest something in the business. The teacher in a practice school comes to his work with a broader view of the educational field than has the average teacher of the city school, who stays with the same work year after year. The training teacher in a normal school has more freedom to exercise his discretion in the prompt suspension or transfer of teachers who are failing than does the city superintendent in dealing with the incompetent teachers that the board is liable to elect. The supervision of the work of the practice school

is more close and careful than that provided for city schools, and yet there is less danger that the work may fall into ruts or that the management of the school may become the mere automatic working of a machine that cannot adapt itself to changing needs and conditions.

PRINCIPAL FRANCIS J. CHENEY, Cortland, N. Y.—This question is of great interest to many of the normal schools of New York state, because a part of the public schools of the villages or cities in which these normal schools are located is in the practice school, and the problem is to make these practice schools as efficient and beneficial to the child as is the public school outside.

This can be done if we have as nearly the same conditions in the practice school as are required in a good public school. What are these conditions? First,—not because it is most important, but because it is helpful,—the environment must be pleasant and attractive. This condition is as possible in the practice school as in the public school. The second, and most important condition, is a good teacher. This the paper of Dr. Sheldon emphasizes. He requires that the pupil teachers shall have a most thorough and careful preparation; they must know thoroughly what they are to teach; they must understand children and know how to study them; they must be familiar with the principles underlying good teaching, and be able to apply them; they must have had an opportunity to observe good teaching; they must be saved from the obstruction of obtrusive critics. If there is one feeling that pupils should entertain for their teachers more important than another, I should say it is confidence. The pupil should have implicit confidence in the teacher; destroy it, and you have shorn the teacher of much of his power. The pupil must believe in the mental and moral power of the teacher. Now, if the critic severely condemns the work of pupil teachers in the presence of the children, that teacher is lowered in the estimation of the children and his work defeated.

Make the conditions what they should be and what it is possible to make them, and the practice school may be made to answer the purpose of a good public school.

PRINCIPAL F. B. PALMER, of the State Normal School, Fredonia, N. Y.—I shall confine myself in the few minutes allotted me to a single point which I think I can make plain most easily by a reference to our experiences in the Normal School of Fredonia. The question has been raised this afternoon whether or not classes taught by practice teachers should be given instruction a part of the day by the critic teachers in order that all pupils might have at least some superior instruction. It has so happened that at Fredonia there was a time when practice teacher taught only one half of the year and critic teachers gave all the instruction the other half. For another series of years practice teachers did most of the teaching all of the year and critic teachers taught classes some portion of each day. During the past few years practice teachers have done all the teaching. I can say confidently that the best results have been secured since practice teachers have taught all the subjects. I do not say that this result is wholly due to the change of system in the use of practice teachers, but at least it must be said that other things besides the direct instruction of critic teachers have their influences in securing the best results. But it may be that the best results are absolutely dependent upon the adoption of practice teachers entirely if they are to be used to any considerable extent. There is a principle involved in the relations of teacher and pupil which, perhaps, is paramount in determining the results we are considering. The relations existing between practice teachers and pupils

are very different from those of the critic and pupils, and if the critic teaches a part of the time and the pupil teaches a part of time the effect of this difference on the pupils will manifest itself in the loss of power by the pupil teacher. When she comes before a class the feeling on the part of the class will be that it is only a practice teacher and the recitation is of little consequence. This will do much to destroy the value of the practice teacher's work. Traditions go far to determine the thoughts and conduct that are essentially characteristic of school life. The views which pupils entertain of their interests and responsibilities as pupils are not based so much on facts as on the traditions that have come down to them. An earnest effort should be made, and it is the first effort to be made, to create a correct sense of the proper relations that should exist between the teacher and the pupil, and this effort must largely fail in the case of the pupil teacher if the critic teacher occupies her place a portion of every day. The time taken by the critic teacher may be more valuable in itself to the class, but it will certainly make the time of the practice teacher of less value than it might otherwise be made.

PROFESSOR J. A. COOPER, Edinborough, Pa.—To have the same results we must have the same conditions and agencies. The aim of a good public school is to prepare boys and girls for manhood and womanhood. It is to fit them to become good citizens. The conditions are to have a good teacher, and in a large public school there must be a good superintendent—a manager and good assistants, and plenty of them. To reach the same end in a practice school there must be a good head to the school, and there must be sufficient help, of the right kind, to do the same kind of work that is done in a public school and to do it in the same manner.

School work consists of two kinds, perhaps three. There is the administration, there is the character building, and there is the instruction. In a large school the head of the institution usually confines himself to administration, and he may be able to do this and do it well, even though he be not a superior instructor.

The superintendent of a large city told me at this meeting that he had many teachers who are more successful in a class room than he could possibly be; but, he said to me, "I can do my work as superintendent better than any one of them could do it." This superintendent is recognized as one of the best superintendents in the country.

If we would reach the best results in the practice school, that is the best result for the pupils, we must have a first-class man or woman at the head of the school as a superintendent and manager, and then there must be class instructors, well fitted to give instruction, full of spirit and energy, with noble impulse and high aspirations, and they must have plenty of time to do all the work that is required of them. With these conditions the results in the practice school will be the same as in the best public school. The children will acquire knowledge and discipline of mind, will form good character, and become fitted for useful citizens and efficient workers in society.

DR. M. MACVICAR, of New York City, a man of wide experience in the training of teachers, who had been largely instrumental in promoting and organizing the normal school system of New York state, and who had been for many years the principal of one of these schools, expressed his views on the paper read by Dr. Sheldon, substantially as follows:

He fully endorsed the views presented in the paper, and particularly the emphasis placed upon the importance of the practice school in the training of

teachers. Teaching, he holds, is essentially an art, as well as a science. As well therefore, he said, may we expect to produce good breadmakers without any practice, by simply requiring them to observe carefully the work done by experts, and by giving them a correct knowledge of the nature of bread and of the processes used in making it, as to expect to produce good teachers by what was designated by a former speaker as the "observation method" of training. In this method, he said, the practice school is entirely dispensed with; the persons under training are simply required to pursue a course of careful observation on expert work, and to receive instruction on the theory and practice of teaching. This he held was essential, but it was only a small part of the work of a rightly organized normal school. The most important part of the work must be done in the practice school. Power and efficiency in teaching, he said, can only be acquired, as in all other arts, by persistent practice under the guidance and friendly, yet exacting, criticism of expert teachers.

Referring to the method proposed in the paper, to give to the students under training the opportunity of observing expert work, he said that perhaps on account of the matter of expense the plan proposed is the only one that can at present be pursued. But he hoped that in the near future, at least the state of New York would provide the necessary means for the support of an observation department in connection with each of its normal schools. In this department, he said, should be taught by expert teachers one class of each grade of pupils taught in the public schools, and the department should be used as a school of observation in which the teachers under training should have the opportunity of forming correct ideas of teaching before entering the practice school.

In his judgment every properly organized normal school should provide for the teachers under training, as implied in the paper under discussion, four distinct and yet correlated courses of instruction, as follows: A course in psychology and the practical study of child nature. This should be followed by a course in which the principles, methods, and practices of teaching are discussed and carefully studied. Running parallel with this latter, a course of careful and critical observation conducted as proposed by Dr. Sheldon by using pupils drawn from the practice school, but better in an observation department as already suggested. After these three courses have been successfully completed, students are then properly prepared to take the course of training in the school of practice.

DEPARTMENT OF ART EDUCATION.

SECRETARY'S MINUTES.

FIRST SESSION.—WEDNESDAY, JULY 8, 1896.

The department met in the assembly room of the High School, Buffalo, and was called to order at 2:30 p. m. by the President, Mr. Walter S. Goodnough, Supervisor of Drawing, Brooklyn, N. Y.

The annual address of the President was followed by a paper on "Art for the Eye," by Mr. Ross Turner, Boston, Mass.

Professor L. S. Thompson, Supervisor of Drawing, Jersey City, N. J., read a paper on "Art in the Schoolroom through Decoration and Works of Art."

Miss Stella Skinner, Supervisor of Drawing, New Haven, Conn., presented a paper discussing the same topic.

General discussions followed, by Miss Wilhelmena Seegmiller, Supervisor of Drawing, Indianapolis, Ind.; Mr. F. Treudly, Superintendent of Schools, Youngstown, Ohio; Mrs. Mary Dana Hicks, Boston, Mass.; Mr. Eugene Bouton, Superintendent of Schools, Pittsfield, Mass.; Mr. Charles F. Wheelock, Regents Department, Albany, N. Y.; Miss Gratia L. Rice, Department of Public Instruction, Albany, N. Y.; Miss Harriette Rice, Supervisor of Drawing, Providence, R. I.; Mr. J. P. S. Neligh, Supervisor of Drawing, West Point, Neb., and by others.

The report of Special Committee on "Art and its Relations to Public Education," appointed at the Denver meeting, consisting of Mr. Walter S. Perry, Director Fine Arts Department, Pratt Institute, Brooklyn, N. Y.; Dr. W. L. Hervey, President of Teachers' College, New York City; Mr. F. Treudly, Superintendent of Schools, Youngstown, Ohio; Mr. A. B. Blodgett, Superintendent of Schools, Syracuse, N. Y., and Mrs. Matilda E. Riley, Art Director, Public Schools, St. Louis, Mo., was read by the chairman, Mr. Walter S. Perry.

The report of the committee was unanimously adopted.

The following committees were appointed by the President:

On Nominations—Walter S. Perry, Brooklyn, N. Y.; Mr. Eben Rose, Rochester, N. Y.; Miss Mary Blake, Grand Rapids, Mich.

On Resolutions—Mr. George Morris, Waltham, Mass.; Mr. E. C. Colby, Rochester, N. Y.; Miss Florence Himes, Albany, N. Y.

The chair called attention to the reception tendered the department by the Buffalo Society of Artists in their rooms at the Library Building, through the chairman of the Local Committee, Miss Helen M. Horton.

Department adjourned.

SECOND SESSION.—THURSDAY, JULY 9, 1896, 2:30 P. M.

The department was called to order, Mr. Walter S. Goodnough, President, in the chair.

Mr. William Hamilton Gibson, who was to have read a paper on "Art in Education, Not as a Servant of Science, but as its Complement," was absent.

Miss Wilhelmena Seegmiller, Supervisor of Drawing, Indianapolis, Ind., opened the discussion of the topic and was followed by a paper upon the same subject read by Professor M. V. O'Shea, School of Pedagogy, Buffalo, N. Y.

General discussion by Mr. Horace Briggs, Buffalo, N. Y., and by Mr. John S. Clark, Director Prang's Normal Art Classes, Boston, Mass., followed.

The discussions of papers were reported by Miss Cora Zelia Parsons, Supervisor of Drawing, Youngstown, Ohio.

Mrs. T. Vernetta Morse, Chicago, Ill., was given opportunity to present the claims of the Central Art Association.

The following report was made by the Committee on Nominations:

For President—Mrs. M. E. Riley, Art Director Public Schools, St. Louis, Mo.

For Vice President—Mr. E. C. Colby, Principal Rochester Athenaeum and Mechanic's Institute, Rochester, N. Y.

For Secretary—Mr. George Morris, Supervisor of Drawing, Waltham, Mass.

Vote by ballot was called for which resulted in a majority vote for the following persons who were duly declared officers of the ensuing year:

For President—Mr. Mark Maycock, Buffalo, N. Y.

For Vice President—Mr. L. S. Thompson, Supervisor of Drawing, Jersey City, N. J.

For Secretary—Mr. D. R. Augsburg, Salt Lake City, Utah.

The Committee on Resolutions submitted the following report which was unanimously adopted:

In regular meeting of the Department of Art Education of the National Educational Association, be it hereby

Resolved, That the members of the department feel deeply grateful to the Local Committee for their services in our behalf in making arrangements for our comfort and convenience, and also to the officials of the school department of the city of Buffalo for the use of rooms for meetings and for other courtesies extended.

Resolved, That we feel greatly indebted to the various societies of Artists of Buffalo for their hospitality in so kindly offering the use of their rooms, as well as for their cordial reception on Wednesday evening.

Resolved, That we tender to the officers of the Department of Art Education of the National Educational Association our thanks and our assurance of appreciation of their labors, not only at these meetings but in the making of the necessary arrangements in advance.

Resolved, That we offer our hearty thanks to those who have so kindly and ably presented the papers at the meetings, and to those who have participated in the discussions.

Resolved, That we heartily commend the proposed plan of the Regents of the University of the State of New York to establish the collection of works of art to be circulated throughout the various schools under their jurisdiction. This we would especially commend to the notice of other states as a wise example to follow.

Committee on Resolutions:

GEO. E. MORRIS.

FLORENCE B. HIMES.

E. C. COLBY.

The meeting was then adjourned.

MYRA JONES, SEC'Y.

PAPERS AND DISCUSSIONS.

PRESIDENT'S ADDRESS.

WALTER S. GOODNOUGH, DIRECTOR OF DRAWING, BROOKLYN, N. Y.

Ladies and Gentlemen of the Art Department of the National Educational Association.

It is with sincere pleasure that I extend a hearty welcome to all in attendance at the annual session of this department. Tomorrow will be the fourteenth anniversary of its organization, which took place in this state in 1883, and I am happy to see that several of the original members are present today. A few have been constant in their attendance all these years, and only they can be fully aware of the good this department is accomplishing for the cause of art education and for its members.

The volumes of reports which I value most highly in my library are the Annual Proceedings of the National Educational Association, and its departments. Here the trend of thought of the leaders in the whole educational field can be followed from year to year. I was interested, recently, in looking over the proceedings of each meeting of this department since its organization, and, through the reports of papers and addresses, tracing the development of art education, as there shown. It is interesting to note how the aims and ideals have advanced and broadened. The mere perusal of the programmes is suggestive of the great progress that has been made, and of the larger view that has been taken from session to session.

A great meeting of this department was held last summer at Denver; one worthy a journey across the continent to attend. It is our hope and trust that this present meeting will be equally valuable and fruitful in its results.

Our programme is indicative of current lines of thought.

The first subject for discussion is one that is attracting attention all over the country; one of the greatest significance, and destined to have a far-reaching influence difficult to estimate. Our other topic, in the programme for tomorrow, touches two distinct lines of thought prevalent today, each having its followers. There is no doubt in my mind which will in the end be found most inclusive and fruitful. It is to be hoped that the discussion at this meeting will have much weight in directing attention to the wider view.

One of the first and most important steps which this department took at its first organization was the appointment of a committee to investigate, during the following year, and report on the condition of drawing in the public normal, high, and elementary schools of the country, and to make recommendations as to methods and courses of study. That report, made at Madison, had much influence in shaping progress for a long time.

Perhaps the most valuable contributions to the general educational discussion that have been made in recent years are the reports of the Committee of Ten, and of the Committee of Fifteen, on "Courses of Study for High and Elementary Schools."

Inasmuch as these reports, valuable and suggestive as they are in matters of general education, gave so little attention to the subject of art education, it seemed that the time had come for our department to make another report. At its session last year, at Denver, it was directed that a committee be appointed to consider the subject of art education in its relation to general education, and to report at its earliest convenience. That report will be made today, and I have no doubt will prove not only a most valuable contribution, but one that will adequately supplement the famous reports of the Committee of Ten and of the Committee of Fifteen.

In view of the larger demands for art education in the schools, it may not be out of place for me to speak briefly upon what should be the training of the art teacher or director for public schools. I am led to this somewhat by the number of inquiries that come to me relative to the requirements for those seeking positions.

The chief means of advancing the cause of art education is broadly and properly trained art teachers. The standard should be raised continually; indeed the cause itself is making new and broader demands. The day is coming rapidly when teachers who in the past would have proved acceptable will fail to satisfy the requirements. As new teachers seek to enter the field it should be our duty to advise them of the necessity of the broadest preparation possible, and to give them such aid as is in our power. It should be the duty of those occupying positions to seek opportunities for improvement.

There are three requisites for success.

First, a good general education. Nothing less than a course at a good high school should be considered sufficient. Much beyond this is desirable.

Second, the best art and technical training possible, including a course at a good art school with sufficiently extensive lines of study to fully meet the conditions.

Third, a good pedagogical training.

The need of the highest artistic and technical qualification is becoming more and more apparent. One should have from two to four years or more of special art study at least, including the necessary technical lines of work. In addition to the ability to draw well, and full knowledge of principle and method, one should be acquainted with the history of art and be informed upon current art work and processes.

The bringing of pictures and other art works into the schools as means of decoration and inspiration, and as subjects for study, the endeavor to develop artistic feeling and appreciation by the study of art products, visits to museums, and other means, will certainly call for other acquirements on the part of teachers of art.

More artistic results will reasonably be expected from the children, and to attain them more artistic ability will be needed by the teachers.

I have no doubt but that artistic expression is, at first, the result of imitation and suggestion from without. Particularly is this true with children of grammar and high school age.

We need to train the imagination, to develop artistic feeling and appreciation, but if we are to expect that the pupil can produce that which is artistic and good in technique, he must continually study good examples of treatment of such a nature as to be directly helpful in the class of work to be expected of him.

More than this, nothing can help him so well as the living teacher. Only he can lead the pupil to a full appreciation of the difference between suggestion

and imitation, between idealism and realism, to an appreciation and knowledge of good composition and of good technique, and to a right development of individuality.

A greater responsibility is upon the special teacher than ever before.

Although adequate art and technical training are necessary, not only in the pictorial lines of work, but in the constructive and decorative fields as well, it must not be forgotten that one who is to become a teacher of teachers, and to direct the work of children of all ages of school life, should be first of all a teacher, and a student of general education. One who is a mere specialist cannot have the best success.

I believe that the art teacher or supervisor of drawing for public schools should have as much as possible of the professional training demanded for the best preparation of a regular teacher. Indeed, where one's supervisory work is large, he should have many of the qualifications necessary for a superintendent; for in this one department, he has to superintend the work of hundreds of teachers and thousands of pupils.

He should be a student of psychology, of the theory and practice of teaching, of methods of child study, and of the history of education. He should be a reader of current educational literature.

Only as he makes a study of, and keeps in touch with, the best thought in general education, can he make his work the educational force it should be, and relate it properly to the general school work.

Only so can he weigh and measure and rightly value the different phases of his subject, and the methods employed, and make all a means to the best educational development of the child at his various stages of growth; keeping ever in mind "the development of the child's capacity for unselfish creative activity, and for the highest spiritual enjoyment."

ART FOR THE EYE.

BY MR. ROSS TURNER, BOSTON, MASS.

As an introduction to what I desire to say in relation to the subject of art for the public schools, I wish to read an extract from Goethe's "Wilhelm Meister:"

"Men are so inclined to content themselves with what is commonest; the spirit and the senses so easily grow dead to the impressions of the beautiful and perfect, that every one should study, by all methods, to nourish in his mind the faculty of feeling these things. For no man can bear to be entirely deprived of such enjoyments; it is only because they are not used to the taste of what is excellent, that the generality of people take delight in silly and insipid things, provided they be new. For this reason one ought every day at least to hear a little song, read a good poem, see a fine picture, and, if it were possible, to speak a few reasonable words."

If the American people are without a sense of the artistic, and

are lacking in a proper appreciation of what is to be found in art, as it has often been said against us, is it not worth while to consider the truth of this charge, which, if true, must be a national defect, and if possible suggest a remedy for such condition.

We often find the natural love and desire for what is in itself beautiful, both in color and form, most strikingly illustrated in the art of a primitive people, a rare and original feeling for art and decoration in the implements of warfare and the domestic utensils of savage races. If we do not possess this feeling for art and art decoration, may we not suppose and believe that our legacy, inherited from some remote primitive art-loving ancestor, has by some unnatural reason been blunted, or perhaps destroyed? When we consider the mass of our people then the charge that is made, that we know not what art is and love it not, is not wholly devoid of truth.

Should you doubt this statement look around and about you. When such small matters as design, symmetry, harmony of proportions and color effects are concerned, where do you find them? Our cities and towns are hopelessly monotonous and commonplace when we consider what they might have been, with broad, well-shaded streets and avenues, the buildings placed with some regard to architectural effect and color; we ought not to be permitted to see on one hand the hovel, on the other a veritable Tower of Babel, a confusion of architecture; our public edifices should not be built in side alleys and our open spaces and parks should not all be in the country. Imagine, if you will, what the Back Bay of Boston ought to be, out-rivaling the famous city of canals in its modern splendor, instead of as now a hideous stretch of more or less commonplace city streets.

But how shall we educate our people to understand art, and how to appreciate it?

By what manner of means shall we invigorate and restore the feeble artistic sense of our people which by reason of neglect and an ugly environment has been all but destroyed?

Do you expect in the immediate future that our art schools, museums of art, picture exhibitions, are to be the means of educating the masses? To the masses of our people they hardly are known, and as a factor in the art education to the greater part of our population they do not exist.

"Are not these institutions good?" one may ask.

Yes, for a purpose excellent, but they do not and cannot reach, under existing circumstances, any considerable number of our people.

But how may we give an equal opportunity to all classes of people, to give them a knowledge of what art is, to see art and study it if

they desire? By building art museums, having more picture exhibitions, drawing schools, etc.?

Hardly, my friends, none of these will wholly answer our needs; we must make our facilities for the study of art more extensive and democratic, more socialistic in its scope and influence.

We must begin (mark the word must) before the child is too old to be influenced by a false and hideous environment; a child must be taken with whatever naturally inherited love for beauty and color it has, and must be protected and educated until it is old enough to discriminate between what is good and what is degrading to the artistic sense and imagination.

A child must be taught what is good in form, in color, and in line, not, as some unwisely observe, the difference between good and bad art. This term is both false and misleading. There is no such thing as bad art; either it is art or it is not.

We must plead then for a proper recognition of those great works of art, which have descended to us as a precious legacy, an heirloom not to be slighted or overlooked at any time.

I doubt if it will be necessary to build just now another art museum, or to add to the number of buildings already erected, to enable us to bring this study of art within reach of our whole people.

A community that has a schoolhouse, no matter how small or unimportant the building may be, may possess its art museum and its school of art if it will have them. And when we consider the possibilities that a community has in possessing many such buildings devoted to the purposes of education, we can very readily see how this problem of art education for the masses—a complete system of art study—is not so difficult a matter to solve as might be supposed. We now have the buildings to use for the purpose we desire; let us see how we may introduce the study of art into the schools.

A little wholesome philosophy may now come into place. An old writer on education observes that:

1. We have the education that nature gives.
2. The use we are to make of this education as taught by man.
3. The education of our experience, which I take as the most important of the three.

To bring these three things or kinds of education into harmony, and to teach mankind to get the best of all things out of his life, is the true end and aim of our existence.

It is far more important to teach him how to live well than to tell him how to die.

The many evils of this life we all know, and in a measure suffer from; to do away with as much of this evil and consequent suffering

is preferable to teaching him to prepare for some future existence, which at best is hope, or a speculation.

The desire of all true teachers and educators has always been to give the best to each pupil, and to develop and strengthen the individual mind, and to create a strong, healthy and intelligent man or woman for the good of the community, as it were adding to the common capital stock of our social organization so much available coin.

To do this many different methods and systems are employed—the best text-books, gymnastics, singing—all beautiful and necessary in themselves—to help form the character of the pupil.

Is it not possible, that notwithstanding all these advantages the pupil is deprived of something he should have? “As education means the development of the whole person and not merely a part of him,” may we not hold back from him something which is his due? In his early years should not the schoolhouse and the schoolroom be made an unconscious power in the scheme of his general education? If so, we must consider the schoolroom a strong factor in his environment, and the influence of such an environment for good, or for evil, on both teacher and pupil.

The question of environment in the larger sense is of such great importance that one might speak of it to any length and not exhaust the subject. But as far as it concerns schoolrooms, we will limit the discussion.

The kindergartners have, I believe, brought into our school system the germ of art through the study of form, line, color; the good result is shown all through our country; the kindergarten has made one step forward in a scheme of general art education, and the value of this, to us, cannot be well expressed in words. This then is the place for us to start with our system of public art education. As our means of art education we may appropriate the walls of our school buildings.

If children are surrounded in the earliest years of their school life with the influence of good books, and gentle manners, why should we not add to these things the silent influence of works of art and color upon the walls about them?

The true value of an art education comes in at this period of life. Let the decoration of the schoolroom and artistic influences surrounding them in their everyday life be such as to unfold the faculties and develop the full powers of the children. That pictures as works of art should at once affect the children is not the aim of schoolroom decoration; they first distinguish outline, color, form, and gradually a combination of all; they need know nothing at first of execution, of the technique. The object of an art education for the children in our schools should be to develop in the pupils a sense of unity or har-

mony, to cultivate within them a regard and love for beauty, to lead them to idealization which is the great power of art, and to give them the ability for art expression.

Beauty is harmony, its opposite, in any form, discord.

Ideas may be suggested to the child in many ways, but most potent of all is a judicious appeal to the eye.

We may suggest art in its truest form, yet not teach it.

The law of suggestion is a well-known principle in educational methods, and is chiefly important in the early development of the child.

The arts of the ear — music, poetry, dancing, etc. — have long been recognized as a part of the training of youth; why should the arts of the eye — painting, sculpture and architecture — not be given a proper position and treated with all the honor and dignity that they demand in our system of art education?

Indeed, Mr. Ruskin most wisely says, "One has no doubt that as we gradually grow wiser we shall discover at last that the eye is a nobler organ than the ear."

The schoolhouse itself, every room, the halls, stairways, etc., should be complete, a harmonious whole — a symphony in color effects — a lexicon of art, history and patriotism; a school building of this kind would be a joy to the whole community. An inhabitant of such a progressive town or village would be well able to remark, "Let us show you our beautiful schoolhouse!" and not bore a guest with endless commonplaces of his own domestic affairs or drag him out to visit some wretchedly stupid church or municipal hall.

The decoration of a schoolroom should, above all things, be quiet and harmonious in color and arrangement. The situation of the room in relation to the sunlight (cold or warm light), should be considered, also the plastic or pictorial decorations should be suitable for the wall spaces (some rooms being better adapted to casts, some to pictures only, others to both) and judiciously selected and arranged upon the walls.

The color of the walls should be selected according to the light in the room; a warm, sunny room, would suggest a darker and cooler shade of color than a room without sunlight. If the light is cold, a very light buff, pale yellow, or Venetian red, will be desirable. The use of dull colors, brown or slate colors, should be usually avoided; the color effect should be responsive and light, never dull, heavy, or cold.

Remember we have under present conditions to struggle against a hideous dull surface known as the blackboard, around and about you all too large, and exceedingly ugly; we should always try to keep

this feature in the schoolroom subordinate to the other portions of the room.

How long before our teachers, our school committees, will rise and do away with this ugly feature in the schoolroom? There are many shades of soft grays and mild slate colors quite as well adapted to show marks upon them as this blackboard.

It will be admirable to arrange a comprehensive group or series of art subjects in plaster, and in pictorial forms, beginning with primitive work, Egyptian and Assyrian, early Greek and Etruscan remains, constituting an historical group.

The work of the Renaissance should be most liberally drawn upon for school decoration. In my opinion, no period in art history seems better adapted for schoolroom purposes than the work of the Renaissance. The matchless works of Donatello, of Luca della Robbia in plastic forms, and the admirable examples in architectural effect from Florence and Venice produce a helpful combination to live with. To observe day by day the beauty of line and form in these works will not fail to give hope to the dullest and inspiration to genius.

It is not difficult to obtain at comparatively small cost excellent casts of objects from the various European collections, as well as innumerable photographs and solar prints. The latter I desire particularly to recommend for the reason that they are without a shiny surface, are sufficiently large to be seen from all parts of the room, and do not require glass, which is always objectionable in a schoolroom. The solar print, if properly mounted and framed in a simple dark wood, without varnish, makes an artistic yet inexpensive object for schoolroom decoration.

In London, England, a company of gifted men, painters, architects, etc., have associated themselves together for the purpose of furnishing at very low cost pictures well drawn and good in color—wholesome art—for schools, hospitals, and club rooms. The name of this association is the Fitzroy Society. Mons. Belville, the eminent French critic, thus praises their work:

“They realize that beauty is stronger than the beast—and the constant method of nature, and one of the most striking manifestations of God, is to liberate, awaken, and broaden the domain of art. The school wall must show the ideal to the eyes of the child.”

Plaster casts may often be placed to an advantage in portions of a room or on a stairway not suited, by reason of the light, to show pictorial or flat subjects; casts may often be placed above doors, or, by reason of their construction, much higher on the walls than a picture could be well shown. A light insufficient for showing a picture might

be admirable for the proper showing of a cast or a bust; indeed, it is safe to observe that a side or half light is generally desirable for the plastic subjects.

As to the woodwork of a schoolhouse — if of natural wood it will combine harmoniously with almost any color with which it is brought into direct contact. If the woodwork is to be painted, then it should be studied from the same standpoint that would be selected for the walls. If the room is very light, paint the woodwork a darkish green, deep mahogany, burnt sienna, or a deep red, with contrasting walls of soft neutral gray. Dark green with pale buff walls will be very agreeable.

A pure Venetian red with a frieze a shade or two lighter, same color, make a most charming wall surface to exhibit plaster casts.

It is well to bear in mind that dark subjects look best in well-lighted rooms, that plaster work is more harmonious if of an ivory shade rather than of dead white, that the ceilings of rooms be white, lightly tinted with yellow.

The halls and stairways of a school should be treated throughout as a whole; if the halls are of a sufficient size to admit, place in them some large plaster casts, busts upon brackets between doorways; on the stairways may be placed architectural fragments, and decorative designs in plaster.

There is also one more thing that should be thought of — and not less important perhaps than what has preceded it. Every schoolroom should have a bust or portrait of some eminent American citizen or patriot placed immediately above the desk of the teacher; above and around this the colors of our common country. Here should be the shrine of American patriotism.

As in the atrium of the house of the ancient Roman were placed busts of the "great and the good," we should display on the walls of our schoolhouses the bust or portrait of the patriot or statesman, with the flag of our country draped about them, inside as well as outside of the schoolhouse.

As to the subjects themselves, the field is so very extensive and broad, one must select mainly for the individual needs of the community; it will be well to be as liberal and catholic in your selection as possible.

The ultimate object which must be kept in view, and which will influence the pupil at every step is that by observation and the silent influence of color and form the instincts of strong natural talent can be guided, and cases of mediocrity of talent may be made stronger by constant recognition of proper combinations in color and form.

A word to all who desire to enter into this work of schoolroom

decoration. For your committee, draw from all the best in your locality—the architect, the traveled, cultivated man or woman. Study text-books on art and architecture; aspire to represent types, quality not quantity; do not ask for advice or outside contributions save in the form of money. If you depart from this rule you will certainly make your schoolroom a sort of a Botany Bay, for the cast-off remnants of what certainly is not art—the disconsolate milkmaid and the lost kitten—these should be relegated to the bonfire, if you will. Keep the débris of Philistinism far enough away from your school-rooms.

It will be a wise thing for the committee having this matter in charge to place upon each object a suitable label with titles, etc., also stating what history may be consulted in the nearest public library relating particularly to the subject. This stimulates an intelligent course of reading. Mr. Horsfall of Manchester, England, makes a pertinent remark which I will quote from a book he has published called “The Use of Pictures in Schools.”

“There is scarcely a subject taught in an elementary school that is not better explained, and more thoroughly and abidingly understood by means of pictorial illustration. For really strong teaching in geography, history and poetry, it is not too much to say that pictorial illustration is altogether indispensable.”

Another very apt illustration was made. He mentioned that a little girl, standing before a foxglove growing in an open space in an English city, said to her companion, “That ’s the flower we ’ve got a picture of in our school.” No one, probably, ever heard a child say “That ’s the flower we had a description of in school.”

What then are history lessons and descriptions, given in words only, likely to be to ordinary town children?

The aim of the new education, in which “art for the eye” takes so essentially a prominent part, is to stimulate the innate thought in humanity, to develop genius and to bring the intelligence into direct relationship with life and objects appertaining thereto.

In closing this argument in behalf of a newer and more interesting environment for both teacher and pupil, I wish to assure you this application and apprehension of a system of art decoration for our public schools in no wise promises any considerable addition to the number of our amateur painters or sculptors. But by a well-directed and proper artistic environment we may reasonably hope to create a generation of something more than faultless spellers.

Again I will quote Mr. Horsfall's excellent book:

“How are we to bring the community to know this, to make it

know that in the starved heart and brain of childhood lies involved the waste of later life; make it see that unless in school we enrich children's natures in ways for which the three R's are of no avail we have no right to expect that they will make good use of what the three R's give them."

*ART IN THE SCHOOLROOM, THROUGH DECORATION
AND WORKS OF ART.*

BY LANGDON S. THOMPSON, SUPERVISOR OF DRAWING, JERSEY CITY, N. J.

SOME GENERAL REASONS.

1. The deepest and most fundamental fact in physical life, perhaps also of mental and spiritual life, is change, motion, more definitely perhaps, oscillation, vibration, or rhythm. If we would affect life in all its phases we must find some practical method of reaching the vibrations of life, the rhythm of the soul. No human methods are more direct or powerful than the use of the fine arts, such as music, dancing, poetry, painting, sculpture, and architecture. These reach the soul in the most direct manner and they tend to produce harmonious, self-centered, well-poised human life.

2. The first demand of the child's spiritual nature is the beautiful. Carlyle seems to have well understood this fact when he said, "The first spiritual want of a barbarous man is decoration."

The aesthetic sense is the center and dominating spiritual sense in childhood, and many mature persons never rise above it. While the relations of utility and morality are yet unseen, or in embryo, "the aesthetic relations make their appeal" to the child "and find a warm and sympathetic reception."

3. Love is the basis of voluntary action. Love is an emotion having its basis in the sensibilities. True decoration is an expression of love. The child loves first, and learns because of that love. Emotion is antecedent to will, and instruction must reach the intellect and the will over the bridge of interest. Nearly all children and many older persons do what they like rather than what they ought, and we all find the path of distaste the most difficult to travel.

The Herbartians, then, are right in laying great stress upon the doctrine of interest. At the beginning, interest must open and lead the way. It is not meant, of course, that the growth of the child's motives is to be arrested at this point; but that interest is to be considered an evolutionary germ which may be made to develop later into

a truly ethical product, a choice of right conduct from the highest motives. In other words, the delight in the beautiful is the beginning of the true Herbartian many-sided interest which shall lead on through desire to the royal act of the will in choosing the good and the right for its own sake.

To summarize these ideas, then, we may say: The great problem of education is to get the rising generation to know right, to feel right, and to do right. While neither of these results can be fully secured without the others, we wish to establish the first two conditions as a means to the third, that is, right conduct, which, of course, from right motives builds up right character. The immediate spring to right conduct is right feeling. The right education of feeling then becomes by far the most important part of education, "not only because it is rightness of feeling which mainly differentiates good from bad people," but because love and respect for good and beautiful conduct in other people is the strongest motive a child can have for right thinking and right acting. For the primary teacher, then, the golden rule is this: "Seek ye first the kingdom of" the beautiful, "and all these things," learning, culture, in short complete education, "shall be added unto you."

Then the greatest qualification a teacher can have is to be able to lead the pupil to admire what he ought to admire, to love all that is loveable in noble human character. Whether a man is destined to be a scavenger or a prince, "only this kind of education can cause temptations to be resisted, duties to be done" and life to be made worth the living. The supreme test, then, to be applied to any subject, method of teaching, or scheme of decoration, that may knock at the schoolroom door is this: What effect will it have on the ideals of the child, on his loves and his hates, and ultimately on his character?

SOME SPECIAL REASONS.

Besides these general reasons we plead for the introduction of works of art into our elementary schools for the following special reasons:

1. Such works must be brought into our schools for most children if they are to be reached at all. It is not enough that children shall occasionally see art works in picture galleries or art museums; and even in schools art works will be comparatively useless unless explained by the teachers.
2. Their introduction will make schools more attractive and joyful for the children. This pleasure will react favorably on all school work, and ultimately on the characters of the children.
3. Their introduction will, indirectly at least, make the children's

homes more pleasant and attractive. As the tastes of the children improve, suggestions will be made to parents, and in many cases they will be carried out, to the joy and uplifting of the whole family. And when these children grow up they will give us cleaner streets, better public buildings, and more ample parks.

4. We must create an art atmosphere for our children in this country. The ability to see beauty is almost universal among American children when some one leads the way. It is only a question of sympathetic and early training, but it must be remembered that spiritual growth is only promoted by spiritual contact.

5. Their introduction would help reveal to many children their own true spiritual nature—their highest qualities, of the existence of which they are not now even aware. Before children can aspire they must have ideals. They must know of beautiful works they cannot easily produce and they must know of admirable persons of high character, heroic conduct. Every child must admire something or die spiritually. We say, then, in the language of another, "Stir his nature with admiration of beautiful things, and you give him not merely a new pleasure, but also new fellow creatures, able like himself to admire. Enable him to enjoy a picture which he could not make and he feels vaguely that among his fellow creatures are people of higher powers than his own, and his conception of life rises to a higher level. It is no exaggeration to say that to enable a child who has never felt it before to feel joy in the beauty of nature and art is to give him a new earth and a new heaven."

6. We must have art works in the schools to enable the child to appreciate outdoor nature. These two subjects, art and outdoor nature, have a reciprocal influence on each other; but in an artificial state of society we oftener learn to see the beauties of nature through art than the reverse.

Browning has truly said:

"We're made so that we love
First when we see them painted, things we have passed
Perhaps a hundred times nor cared to see;
And so they are better painted — better to us,
Which is the same thing. Art was given for that:
God uses us to help each other so,
Lending our minds out."

UNDERLYING PRINCIPLES TO BE OBSERVED.

Having presented some general and some special reasons for the introduction of art works into the schoolroom, it remains to point out the way. And, first, as to some principles which should be heeded in this undertaking:

1. The aim. It is not amusement, entertainment, or decoration alone, but instruction and cultivation of the taste.

2. To this end there must be a system or a plan to be followed. A mere jumble of pictures or of art products, however good, may defeat the purpose in view. While we must ask the artists to tell us what good art is, we believe practical and cultured educators will be better judges as to arrangement, classification, and use of the materials selected.

3. Small pictures, or photographs are not desirable. For the lower grades, especially, simple outlines with some color will be found better than solar reproductions. Confusion must be avoided by not placing too much in one room at the same time. If material is abundant a part of it only should be exposed at one period.

4. At first, whatever objects are presented, they should be simple and beautiful. Too complex beauty, or a multiplicity of beautiful objects, may overpower or confuse the child and produce a permanent dislike to the finer details of beauty. We should guard against making children so fastidious that they cannot endure ugliness when it may be their duty to do so. While the love of beauty is exceedingly important, the love of duty is still higher.

5. The pictures and art products exhibited should be such as will appeal:

(a) To the senses of the child. Here we come to the first gateway from the outer world to the soul, and our objects must be such as will easily unlock this gate.

(b) To the imagination of the child. That is, the objects should be suggestive—not going too much into details, but permitting of fuller elaboration in the mind of the child.

(c) To the judgment, or reflection. That is, the objects should possess relations that may be discovered by reasonable effort.

(d) To the reason. Especially in the higher grades these objects should favor insight into universal or general principles.

(e) To the moral sense, or the ethical standards. That is, art objects must be such as will confirm the pupils in habits of right conduct.

6. A caution. There is danger that we may attempt to hurry the development of artistic tastes. It seems to be agreed that the child, at least in a general way, passes through the same stages of evolution that the race has passed through. If so, he cannot be made, while in the savage, barbarous, or semi-barbarous stage, to jump to the ideals of Greek or Italian art at a single bound. We must not be deceived by the apparent delight of precocious infants who are exceptionally well-born, and brought up in artistic homes, when attracted by a beau-

tiful picture. The average boy cares more for his own crude picture of a boy spinning a top than for the benignant smile of one of Raphael's cherubs, and it is right that he should do so. We cannot get him out of this stage by merely telling him what he ought to admire. Let him admire and encourage him to admire whatever he can admire sincerely. Sympathetic instruction under the influence of simple forms of beauty will do the rest. Schoolroom art, like other studies, should be graded according to the needs and the development of the pupils.

A DEFINITE SCHEME.

In accordance with the preceding principles, the writer presents the following plan:

1. Let the walls and the window shades be tinted with some quiet gray, or tints from the middle part of, or the blue end of, the solar spectrum.
2. Place a frieze around the upper part of the walls and perhaps cover the ceiling of each room so as to illustrate different styles of historical ornament, arranged so as to bring the earliest styles in the lowest grades. Both painted and sculptured examples could be used, placing the flat painted ornament in the lower grade rooms.
3. Let the other art works, such as sculptures, painting, photographs, etc., be selected to illustrate the literature, the art, the history and the geography studied in the various grades.

ARRANGEMENT OF ART WORKS BY GRADES—FIRST SCHOOL YEAR.

The frieze and the ceiling of this room should consist of Egyptian flat and colored ornament, such as that formed from the lotus flower, the winged globe, the scarabæus, the zigzag, the wave scroll, etc. Probably no plant form of the world has had such a wide influence on its ornamental art as that of the lotus, having been used for this purpose for thousands of years, all the way from India to the Straits of Gibraltar. Again, its simple treatment by an early race of people fits it to be appreciated by the child mind, both in form and color. The appropriate literature for this period of childhood are the myths of Apollo and Cinderella, stories of Circe's Palace, Ariadne, Pegasus; also Daniel in the Lion's Den, Hercules, etc. Let the other art works be selected to illustrate these or whatever else may be used as reading matter, matters of study, or conversation.

SECOND SCHOOL YEAR.

For the frieze and ceiling of this room let painted Greek ornament be used; such as the fret, or meander, or the anthemion, the astragal and the egg and dart moldings. The other art works may be selected

to illustrate Bible stories, *Æsop's Fables*, *Marriage of Thetis*, the *Golden Apple*, *Noah's Ark*, *Robinson Crusoe*, etc.

THIRD SCHOOL YEAR.

The frieze and ceiling for this year may consist of Roman ornament; such as the acanthus foliage and the scroll work and the capitals evolved from it, as well as the animal monsters, the triton, the griffin, and the chimera. The other art works may illustrate the stories of *Pegasus*, *Hercules*, *King Midas*, *Bellerophon*, the *Wooden Horse*, *Pygmalion and Galatea*, *Atlanta's Race*, *Tantalus*, *Ruskin's King of the Golden River*, *Hawthorne's Daffy-down-dilly*, and *Snow Image*, etc.

FOURTH SCHOOL YEAR.

The frieze and ceiling for this room should consist of Byzantine ornament; that is, Christian ornament elaborated from the lily, the vine, the crescent, the trefoil, the quatrefoil, the cinquefoil, etc., including the Byzantine capitals, and all-over patterns. The photographs, the sculptures, and the paintings may illustrate the stories or myths of *Vulcan*, *Pandora*, *Orpheus*, *Zeus*, *Legend of the Sleeping Beauty*, *Proserpine*, *Marco Polo*, *Palissy the Potter*, *Grimm's Fairy Tales*, and other literature suitable for this grade.

FIFTH SCHOOL YEAR.

Saracenic or Moorish ornament; such as the Arabian borders, strap-work, the *Star of Solomon*, and *Alhambra* ornamentation will be found suitable for the frieze and ceiling of this room. The literature of this grade, to be illustrated by works of art, may consist of the myths of *Jupiter*, *Mercury*, *Charon*, the *Odyssey* and the *Iliad*, *Pilgrim's Progress*, *Gulliver's Travels*, *Hiawatha*, *Hans Brinker*, *Early German Tales*, *Irving's Alhambra*, *Swiss Family Robinson*, etc.

SIXTH SCHOOL YEAR.

Gothic ornament, such as the dog-tooth, the ball-flower, and the zigzag moldings, the fleur-de-lis, crockets and window tracery, will be found suitable for the frieze and ceiling of this room. The literature, to be illustrated by art, may consist of the story of *Polydorus* from *Virgil*, of the *Dryad* and the *Piper*, *Cyrus*, *Darius and Xerxes*; the myth of *Cupid*, *Rip Van Winkle*, *Lady How* and *Madam Why*, *Reynard the Fox*, *Tom Brown's Schooldays*, etc.

SEVENTH SCHOOL YEAR.

The introduction of the Renaissance ornament for the frieze and the ceiling of this room will afford an excellent opportunity to review the classic styles and show their development. For reading matter, to be illustrated by art in this grade, take the myth of *Laocoon*, *The*

seus and the Amazon, *Midsummer Night's Dream*, Vasari's Italian Artists, *Rasselas*, Goethe's *Erl King*, *Evangeline*, *Great Stone Face* by Hawthorne, Lowell's *Sir Launfal*, Tennyson's *Sir Galahad*, etc.

EIGHTH SCHOOL YEAR.

In this room modern styles of ornament may be used for the frieze and the ceiling. Such examples may be selected as will best illustrate the principles of ornamental art in all ages. The literature to be illustrated by art may consist of Ruskin's *Athena*, *Iphigenia* from Euripides and Goethe, *Prometheus*, *Ben Hur*, Scott's *Ivanhoe*, *Nibelungen Lied*, Pepy's *Diary*, *Vicar of Wakefield*, Thomas á Kempis, Marlowe's *Faust*, *Prue and I*, Schiller's *Veiled Statue of Truth*, etc.

HIGH SCHOOL GRADES.

In all high schools there ought to be a course in art history, either as a distinct course or in connection with general history. To illustrate this course there should be large solar prints of great art works in ceramics, architecture, sculpture and painting.

In ceramics there should be photographs and drawings of Egyptian, Greek, Roman, Chinese and Japanese vases, as well as archaic and modern forms.

In architecture the Parthenon, the Temple of Vesta, the Coliseum of Rome, St. Peter's at Rome, St. Sophia at Constantinople, St. Mark's at Venice, cathedrals at Cologne, Milan, Strassburg, Amiens, Rheims, etc., and prominent buildings in our own country, should be represented.

In sculpture the Parthenon Frieze, Apollo Belvidere, the Venus of Melos, the Niobe Group, Diana of the Stag, Laocoon, Michael Angelo's Moses and many others should be available.

In painting, such masterpieces as Michael Angelo's *Last Judgment*, the figures from the ceiling of the Sistine Chapel, the Transfiguration of Raphael, the Sistine Madonna, Correggio's *Night*, Da Vinci's *Last Supper*, Murillo's *Holy Family*, and the Immaculate Conception are a few of the many that might be mentioned as suitable for art study in the high school.

Representations of the Parthenon frieze might be made a permanent frieze in the schoolroom, while the others could be hung on the walls, a few at a time, as they were needed for study.

*In the selection of the literature suitable for the various grades the writer is indebted to the following: "Literary Landmarks for Young People," by Mary E. Burt, and published by Houghton, Mifflin & Co., of Boston; also to "Course of Study in History and Literature," by Emily J. Rice, published by A. Flanagan, Chicago. Both these books are well worth careful study by all teachers.

*ART IN THE SCHOOLROOM, THROUGH DECORATION
AND WORKS OF ART.*

BY MISS STELLA SKINNER, NEW HAVEN, CONN.

The third speaker upon a subject can hardly expect to offer any new thought of a general nature. I purpose, rather, to speak from personal experience upon the choice of pictures, and the interpretation of them to children.

Not long ago on a certain December night two women were sitting together in a little country railway station. One of them, evidently in the first flush of her teaching experience was telling the other of the beautiful gift which her pupils had made her. "It is a picture of a woman and baby," she explained, and it is called 'Madonna.' Who was 'Madonna, anyway; she was an author, was n't she?" "Yes," assented the other, "I think she was." "Well," concluded the first speaker, "she's beautiful, anyway."

One's first impulse is to smile at such ignorance, and to feel a kind of self-satisfied pity for its possessor. Yet upon second thought we find ourselves wondering whether after all she has not caught the essence of the picture. But some day when its whole blessed significance dawns upon her what added happiness will it bring!

Several years ago the suggestion was made to our primary teachers that a picture of the Madonna be hung in the schoolroom in connection with the Christmas idea, and many of the teachers responded to the suggestion. This gave rise to a discussion in a subsequent teachers' meeting as to how the picture should be interpreted to the children. Some felt that its religious significance should be given, but the consensus of opinion was that it should stand as the type of motherhood, and the love which surrounds all children.

We were much interested to learn what Madonnas appealed most to the children, and found that their choice centered upon three: Raphael's Madonna of the Chair, Sistine Madonna, and the Bodenhäusen Madonna. Even the little children are impressed with the majesty of the Sistine; but I think they love most the Madonna of the Chair, in which brother love is added to parental.

Many touching incidents are recalled connected with the pictures; the children were eager to tell of home babies, that that was the way their mother loved their baby; and we came to realize that some of the poorest homes were rich in affection.

The primary children of one of our Sunday-schools celebrated the

Christmas season by giving a Bodenhauseu Madonna to one of the mission kindergartens. The picture was placed against the wall while the teacher told the Christmas story to the children clustered about it. As they turned to go to their tables, one little waif asked if he might "kiss the baby," and straightway every little urchin in turn bent over and reverently kissed the "Christ Child" as he turned to go to his work.

In a fifth grade room recently the children were shown three Madonnas by Gabriel Max, from which to choose. When the choice of the majority had settled upon one they were asked to write upon slips of paper the reasons for their selection. Several chose it because it was the prettiest; others because they looked happy, brave, graceful, pure or true; one with a strict sense of propriety because it was less "undressed" than the others. One little boy says: "Her eyes look calm. She sits still. She is dressed fine." Another, "It puts me in mind when we were little babies and our mother held us like that." And still another, "I chose that picture because it looks kinder natural." Many spoke of the "life in it."

A few weeks ago I asked a thoughtful primary teacher who is in close sympathy with the best kindergarten ideas for her experience in interpreting the Madonna idea to her children. After relating the various plans she had tried, she gave as the result of her experience the opinion that the most satisfactory way was to let the picture greet the children when they first entered school in September, and become familiar to them, but to defer its interpretation until the Christmas season. One little fellow confided to her that the picture "made him think of his mother; she was awful nice."

With the Madonna was told something of the life of Raphael, his unselfish character, his eagerness to learn, and his being a countryman of Columbus, living in sunny Italy at about the same time. In many instances the beautiful boyish portrait of Raphael was shown.

Soon other teachers began to wish for pictures, and to ask for advice, and we found it no easy matter to name off-hand the one picture best suited to a particular grade and class-room. A request came from one of the principals for co-operation in compiling a list of pictures to recommend to her teachers; a public-spirited citizen wished to contribute a picture to each class-room of a new school bearing his name, and desired help; and so, through the very force of circumstances, was compiled a list of casts and pictures suited to the various grades, and correlated with the general course of study.

We were agreed at the outset that pictures in a schoolroom should serve two purposes—(pri.) that of general art culture, or spiritual

uplifting, and (sec.) the strengthening of other school subjects. While a picture might serve both purposes it need not necessarily do so.

Under "General Art Culture" we have tried to suggest for each grade the choicest pictures and casts the world has known, keeping constantly in mind the age of the children and a natural sequence of thought from grade to grade.

In this connection one or more artists have been suggested for special study in each year, as an author is studied in connection with his writings. In the kindergarten and first year, where the Madonna thought is emphasized, Raphael and Abbott Thayer have been chosen, although others might be studied with equal profit, especially if pictures by other artists are selected.

The story of Raphael's life is pleasing to children, and Abbott Thayer's equally so, in the recital of his childhood in the country and his early love for all living and growing things, which later culminated in the representation of beautiful womanhood and childhood.

Aside from the pictures expressing a religious idea other illustrations of childhood are needed, and of animal and plant life, such as "Feeding the Chickens," by Jacques, and Lambert's "Family of Cats." Van Dyck's "Children of Charles I." is always a favorite; the children note the family resemblance in the children; they think they must have a kind mother because they look so happy and neatly dressed. They decide that the children have their "Sunday clothes" on because they are having their pictures taken; and they enjoy the little spaniel at the brother's feet.

Other artists suggested for study in the primary grades are Michael Angelo, Murillo, Dupre and Millet. While the work of Michael Angelo, the man, requires maturity of thought for comprehension, the boy Michael Angelo, carving the faun's head out of a piece of marble interests children very much, and the story connected with it delights them. Even tiny children speak of the laughing expression on the faun's face.

Michael Angelo, the stern, serious, lonely man, has little attraction for children, but they can be told of his devotion to his work, how he "wrought with a sad sincerity" to express the great thought which came to him, and how his life was gladdened by having the sunny-natured Raphael for a friend.

Cattle and sheep being subjects for special study in language in the second and third years, Dupre and Millet were chosen as representative artists. The children enjoy Dupre's cheerful episodes of farm life. His "Escaped Cow," and the frantic efforts of the farm boy to catch her delight them; while "The White Cow," with the

young girl milking, and her mother watching from the door, is a charming pastoral scene.

In sheep pictures we have an embarrassment of riches—"Shepherdess," "The Sheep Fold" by Jacques, Le Rolle's "In The Meadow," Monk's "Hillside," and many others; while "David, the Shepherd Boy," by Elizabeth Gardner, is full of inspiration.

Other choice pictures for the primary grades are Bouguereau's "At the Fountain," a young girl in the dewy freshness of childhood, looking at you with wistful appealing eyes, her hands clasping the handle of a quaint pitcher—or teapot, as the children called it, until one little Italian remembered having seen similar water vessels in his native land—also Madam Le Brun's portrait of herself and daughter, Von Bremen's "By the Brook," and Reynolds' "Angel Heads." One little girl liked the "Angel Heads" because if she was good she would be like them some day. Another because they were "in the sky," and yet another because "it helped her to be good and kind."

Before leaving the primary grades let me share with you some interesting testimony from an earnest, intelligent, primary teacher: "It has been my experience that little children manifest most interest in pictures containing some human element. Pictures of animals rank next, while landscapes, marine views, etc., come last on the list. When this human element is lacking, the children's imagination always hastens to invest the picture with some suggestion of life. If it be a house perched on a lonely hill, the people are all inside eating their dinner, or they have all gone to the woods for flowers. If it be a ship the men are back of the sails, or down stairs asleep.

It is the doing or the going to do that the little ones care for. For pictures that illustrate any particular myth, story or poem, it seems to me well to tell the story before showing the picture. My children were much interested in the story of Apollo's driving the chariot of the sun. Then, when the picture was shown, they immediately recognized it as embodying the thought of the story.

I was pleased to see them going up to it before school the next day, and pointing out to each other what most appealed to them in the picture. One boy wished he could drive those four horses once! With a picture like Troyon's "Shepherd and Sheep," it is best to present it without previous explanation. Let the children tell what they will, and then, by judicious and suggestive questioning, supplement their unaided thought till the picture becomes full of rich and beautiful meaning to them. The tender care of the shepherd, the faithfulness of the watchdog, the patience with which the man must have trained the dog—all these and many other thoughts will readily appeal to the child.

You remember the picture writing of Hiawatha, where it says:

And each figure had a meaning,
Each some word or thought suggested.

That is the way it should be with our schoolroom pictures.

In the intermediate grades, Landseer as the painter of dogs, Rosa Bonheur of horses, and F. S. Church of lions, have been chosen for special study. Also Thomas Moran, the painter of western scenery, Jules Breton, who gives us such happy illustrations of out-of-door labor, and Boughton for his artistic interpretation of incidents in the lives of the pilgrims.

Then too, in these grades where the children are passing from the happy unconsciousness of childhood to the long, long thoughts of youth, casts and pictures of ideal grace and beauty have been suggested as a constant influence in shaping their ideals. Thorwaldsen's "Mercury," the beautiful bust of the "Maiden of Lille," Burne-Jones's "Hope" and "Temperance," Max's "Nydia," the "Viking's Daughter," by Church, and Thayer's "Brother and Sister."

In the grammar grades the masters of landscape and marine are studied; Corot, Inness, Edward Moran and Turner; and, in addition, such pictures as "Queen Louise," Tadema's "Reading from Homer," Mason's "Harvest Moon," and Burne-Jones's "Golden Stair," have been selected, the aim being to give variety both as to subject and cost, but to "hold fast to that which is good."

In casts we have tried to follow the same sequence of thought as in the pictures: Madonnas and cherubs, with miniature animals for language lessons in the primary grades. In the intermediate, choir boys, animals, and mythological subjects related to literature, and examples of Greek and Roman sculpture, busts of great men, and typical examples of historic art are chosen.

Realizing the great desire for color on the part of children, and the need of it in our schoolrooms, a diligent search has been made for suitable pictures to meet this want. Many flower and fruit pieces have been found and assigned to grades in harmony with the plans for nature study and drawing.

Some good reproductions of landscapes and marines, also, and a few historical pictures, besides dainty little colored sketches of children, birds, and animals for primary grades. Some interesting suggestions of simple, conventional, colored pictures of the seasons, and of Mother Goose incidents were shown at the recent Brooklyn exhibit of works of art, and warmly advocated by one who had given the matter careful thought, and I hope soon to test their value in the schoolroom.

It is not easy nor perhaps necessary to decide what pictures should

be considered under the head of art culture, and what ones classified under literature, United States history, geography, and historic art. Some minister to many needs, nearly all tell a story which may be utilized in language, literature, or history.

Those for primary grades in which the story claims the attention, such as "Pandora's Box," Dupre's "Balloon," Rosenthal's "Home from a First Voyage," or Hardy's "Ulysses Ploughing the Seashore," would be classified as language pictures; while portraits of authors, with views of their homes, and pictures illustrative of their writings would come under literature.

In this connection, and also in geography and history, not only pictures to hang on the walls, but portfolio collections and notebook illustrations should be borne in mind.

We find that the children are very fond of the portraits of authors. I was surprised the other day to learn how many pupils in a first year primary room preferred a picture of "Longfellow in his Study" to anything else in the room, and greatly pleased with their explanation of the picture. In very broken English, for the most of these children were Russians and Italians, one boy told me the story of the school children's presenting Longfellow with his study chair, while the others listened delightedly.

But above everything else the children love the portraits of our national heroes. Recently in a class-room of children eleven and twelve years old, twenty-four out of thirty chose a portrait of Washington from the half dozen or more pictures hanging on the walls. All statements as to choice were made in writing, so as to have them unbiased.

Various reasons for their preference were given; his bravery, honesty, and kindness to animals, but the three which predominated were that he was the "Father of his Country," our "First president," and that "he never told a lie." One pupil, a boy of twelve, writes in answer to my inquiries: "I like the picture of George Washington because he was so brave, and that he did n't tell lies. If I bought a picture I would buy one of George Washington; of all the pictures I ever saw I like George Washington's the best. I could live with it for all my lifetime, because I like it so well."

Another boy of sixteen years so pitifully crippled that he could scarcely write says: "He was the first Christian, and we want to follow his example. I am trying to do it."

History is full of incidents for illustration. Beginning with early local history, we have a picture of the first meeting-house of the New Haven Colony, and the Charter Oak at Hartford. Enlarging the circle of experiences we learn of the adventures of Columbus of which there

are some good illustrations in colors. Incidents in the lives of the Pilgrims have been most delightfully pictured by Boughton and Bayes, as well as immortalized in verse by Longfellow.

I wish, however, to enter an earnest protest against placing pictures of war and carnage upon schoolroom walls. If we must teach the horrors of war through pictures, let them be in the form of portfolio illustrations for incidental use. Let us teach our children that our wars have resulted from a difference in principle, that men have fought because true to their convictions, but that universal brotherhood never dies. "We, the victors, can afford to be generous. Let us banish from our walls and from our memories pictures of men mad with the insanity of war, and put in their stead such ones as Hoven-den's "In the Hands of the Enemy," where all difference of opinion is forgotten in the care of a young wounded confederate in a union home. To live for our country rather than to die for it is the lesson for today. Let us teach our children that they live in a country made free, and upon soil consecrated by the blood of patriots; that their great duty is to preserve these blood-bought privileges by brave and unselfish living. That, in the words of Carl Schurz: "To live for a good cause honestly, unselfishly, laboriously, is at least as noble and heroic as to die for it, and usually far more difficult."

I would not be understood as decrying hero worship. Let us establish as high ideals as possible, but let us teach that it is as heroic to lead a campaign against filth, corruption, and vice in a modern city, as to direct an army on the battlefield. Sheridan's ride was indeed victorious, but Colonel Waring and his "White Angels" have also won a glorious victory and deserve canonizing as benefactors of their race.

In geography the aim has been to select typical illustrations of the various subjects for portfolios and to call attention to pictures by good artists which might be utilized, as Turner's "Approach to Venice," Moran's "New York from the Bay," "On the Coast near Schwenningen," by Mesdag, and Schreyer's "Halt on the Oasis."

Edwin D. Mead says: "A bright boy would without effort, and almost by-the-by, learn ten times as much about the aspect, the industries and resources of the United States, if a series of great photographs, now so accessible and so cheap—of the White Mountains, the New England coast, the beauties of the Hudson, scenes in New York the metropolis of the country, in Washington, its capital, the Great Lakes, the Mississippi, the prairies, the Rocky Mountains, the Pennsylvania coal mine, the southern cotton field, the corn fields of Dakota—were on the walls of the schoolroom or in portfolios, as he could learn by weeks of study in the books."

In historic art illustrations, the way is comparatively clear, having a well-defined course of study in art education; such examples of architecture, sculpture, and ornament as best illustrates this course, should be assigned to each grade, correlating geography and general history with it as closely as possible.

Modern and local examples of the different styles should be studied and compared with the originals. For instance, with Egyptian art we show the gateway to Grove Street Cemetery as a beautiful example of the Pylon. Our old state house on the green, of which pictures have been preserved, is a good example of the Greek; the "Scroll and Key" Society Building of the Saracenic and Osborne Hall of the Romanesque. Sometimes, art features being equal, there is a choice in objects as to the story embodied. One would therefore select the Arch of Constantine rather than that of Titus, one celebrating, as it does, the victory of Christian over Pagan beliefs, the other the downfall of Jerusalem. So, too, one would choose "Orpheus, Euridice and Hermes" in preference to "Aphrodite Persuading Helen."

May the children have the final word? "I think our schoolroom is a good house for manners, for education and to obey." "Pictures of flowers in the schoolroom make it very bright." "A room with no pictures is not pleasant." "It makes a lot of difference whether we have a nice room. When we have a nice room like this we can take comfort in learning our lessons." "I like to sit in a nice clean room. Any one would like to work in a room that is pretty." "I think when a room is pretty you can learn better and feel happier."

DISCUSSION.

[Reported by Miss Cora Z. Parsons.]

PROFESSOR L. S. THOMPSON, Superintendent of Drawing, Jersey City, N. J.—I take no exception to anything that has been said in regard to schoolroom decoration.

Miss Seegmiller, Superintendent of Drawing, Indianapolis, Ind.—I wonder what duty is. Is it ugliness? Duty may be and should be beauty. It seems to me that there cannot be too much beauty in a child's environment.

SUPERINTENDENT F. TREUDLEY, Youngstown, Ohio.—God beautifies all which he creates and "we see as through a glass darkly." It is art which is to reveal this beauty to us, enabling us to see more clearly. It is our duty to surround the child with good pictures and good literature that he may receive this interpretation of nature. The pictures should be of such a character as will appeal to the spiritual side of the child and should be reproductions of pictures from the best known artists. I was much pleased with the remarks of Mr. Turner in regard to the effect of pictures upon the manners of the pupils. In

our schools where we have made an attempt to decorate this has been most remarkable.

MR. THOMPSON, Superintendent of Drawing, Jersey City, N. J.—There is such a thing as a child having too much candy and there is such a thing as a child having too much beauty. He may become so accustomed to it that he will not appreciate it.

MRS. MARY D. HICKS, Director of Prang Normal Art Classes.—It is often difficult to begin this work of decoration. By centering our efforts on one room and placing within this room all the beauty which we can obtain, the influence will extend to other rooms and school buildings. "Out of these things are the issues of life." We must help our children to live, and the laws of art are the laws of life. Our pictures must not be those of geography, history and arithmetic, but something indefinable—works of art.

Schoolrooms decorated with the products of minds of the best of men engender the feeling of living constantly in their presence. Select those pictures that are recognized as works of art. Art is idealization.

MISS HARRIET RICE, Superintendent of Drawing, Providence, R. I.—I was much impressed with the thought which Mr. Turner gave us in the expression, "Art for the eye." "We have had music for the ear" and it seems as if "art for the eye" so well expressed our purpose in schoolroom decoration.

SUPERINTENDENT EUGENE BOUTON, Pittsfield, Mass.—I wish to acknowledge the helpfulness of the paper read this afternoon. I have found the influence for good of pictures upon the pupils is very great. I think we have made the mistake of selecting pictures of too severe a nature, many of them lacking the higher element spoken of here this afternoon. I am glad to hear the opinion advanced that the instruction in history of art should be coupled with that of general history of civilization. I believe in the study of the type-forms but think the work should be extended to natural objects.

MR. CHARLES F. WHEELOCK, New York State Regent's Department.—I have been much interested in the papers of this afternoon. The Board of Regents of New York have made a collection of works of art which are to be circulated through the different school districts in the state. This it is hoped will awaken a taste for good decoration and lead to the purchase of permanent collections.

MISS GRATIA RICE, State Supervisor of Drawing for New York—In many cases friends have given money for such a collection and in some parts of the state donations of money have been made by the pupils.

MR. W. S. PERRY, Director of Art Department Pratt Institute.—Collections of fine photographs as large as 8x12 can be obtained as reasonably as two dollars a dozen, and kept in portfolios. When required for use may be arranged along the wall in a frieze and held in place by a narrow molding.

ART EDUCATION IN RELATION TO PUBLIC EDUCATION.

REPORT BY WALTER S. PERRY, CHAIRMAN OF COMMITTEE APPOINTED AT THE DENVER MEETING.

Art education has come into the schools chiefly under the title of instruction in drawing. All drawing is not art, but all art necessarily involves drawing. As the importance of drawing becomes better understood by the public, art education is more rightly valued.

The subject presents itself in a number of divisions and subdivisions.

I.

1. Drawing is a universal language. The public at large does not realize its omnipresence in everyday affairs. The clothes a man puts on in the morning were made from drawings or patterns. The keys and small coins in his pockets were made from drawings. The chair in which he sits eating his breakfast was made according to drawings; so were the carpets and wall paper, the table and objects upon it. The stove on which his breakfast was prepared, the system of water pipes that brings him his drinking water, the staircase he descends to get to the street, the railroad station, the car on which he rides down town, the illustrations in the newspaper which he reads on the way, and the printing presses which duplicate them—all involved skillful drawing somewhere and by somebody, in order that they might exist for his convenience and pleasure.

Drawing is a necessary factor in the larger part of all productive industries. It is practically the universal language of industry. If this were more generally understood to be the fact, the teaching of drawing in the schools would have a stronger support on the part of the conservative and "practical" men of the community.

2. Drawing is of great help in developing perceptive power. Most people do not observe. They look at objects but do not see them; that is to say, though the objects produce the proper physical effect upon the organs of sight, the mind has not been worked up to any distinct consciousness of these sense-impressions. It does not recognize them nor realize that such experiences are going on. The desire and attempt to draw the appearance of an object immediately leads to more definite knowledge of that appearance; for the person begins to pay more attention to the impressions he receives through his senses.

Everyone who has tried to draw knows this from his own experience. The effort to draw teaches one to see.

The power and habit of observing accurately mark one of the fundamental differences between the incapable man and the man of power. This great difference is a fact well known to all who take any responsible share in practical affairs. The other fact, that the study of drawing can and actually does aid greatly in developing the powers of attention, observation, and intelligent thought, ought to be made equally plain to the public at large. The public would then see that instruction in drawing is something which every school child, rich or poor, ought to have to fit him for life. And the children who are to constitute the workman and artisan classes need drawing especially, as a help in becoming mentally alert, so that in the affairs of practical life they may keep the average of industrial ability and prosperity as high as possible.

3. Drawing is a powerful help to thought by furnishing a means of thought-expression. Expression is necessary to complete thought. The child gets a more definite grasp of his own idea by trying to express it to somebody else. This in a large part is the reason why we have oral and written recitations as well as study periods. The effort to express in oral or in written language the facts the child has observed, or the ideas which these facts have suggested to him, gives his thought a sharper outline in his own consciousness and impresses it more deeply on the memory. The writing out of the story of the voyages of Columbus detaches the Columbus story from other stories of adventure and discovery, and makes its main points stand out clearer and stronger in the mind. But there are many ideas which can be more fitly and perfectly expressed by the language of drawing than by the language of oral or written words. This is the case with much of the elementary scientific observation. In stating the observed differences between the appearance of sprouting corn and sprouting peas—for example—a drawing is much more precisely expressive than any description in words. In giving a detailed account of an experiment in physics, a drawing of the apparatus is far more satisfactory than verbal explanations alone. Drawing has an especial appropriateness in connection with any kind of manual training. If a certain joint is to be constructed in wood, a pupil can far better express his understanding of the task he is attempting by drawing the joint than by talking or writing about it. Drawing is an absolutely necessary means of expression when aesthetic ideals of form and color are in question. If a fine harmony of spaces and lines, or of light and dark has been conceived and worked out in the arrangement of a group of objects, or in the appearance of the main elements

of a landscape by viewing it from some particularly selected standpoint, drawing is the most simple and natural means of expressing the idea.

In any division of work in which drawing is one of the natural modes of expression, drawing is needed in order to make that particular department of study of the greatest value to the pupil. This is conspicuously the case with elementary science or "nature study" in primary and grammar schools. Facts and phenomena of nature are observed much more thoughtfully when a knowledge of them is to be expressed afterwards by drawing. Practical schoolroom experiences show that the habitual use of drawing as a means of recording observation enables the pupil to get vastly more power to observe accurately, more power to reason sensibly, and more power to remember distinctly out of the science study than if the drawing were omitted.

This is pre-eminently an age of science. There is a strong pressure brought to bear on the schools to turn them more and more toward the study of nature at first hand. A more general realization of the kind of help and the amount of help which drawing can give to this nature study movement must naturally strengthen the drawing in the estimation of educators and teachers generally, as well as the public.

4. Drawing is the very best available means for developing aesthetic feeling and creative imagination and cultivating good taste in the choice and use of material things; in short, for developing individuality and power in the direction of art.

It can almost be said that drawing is the only means existing in the public schools for developing in children the power to appreciate what is best and most essential in the arts. The study of the best literature assists to a large extent to develop appreciation of what is beautiful in nature, but, outside of the study of literature and drawing there is practically nothing done to give children any insight into the beauty and significance of works of fine art and industrial art. Here the study of drawing broadens into art education.

The difference between drawing as a part of nature study or science study and drawing as a feature of art education is chiefly this: Scientific drawing is an expression of facts just as they are found in reality. Artistic drawing expresses the idealization of what is real. "The idealization of what is real" does not mean the fantastic substitution of something unreal in the place of sensible existence. It means the seeing of the ideally perfect thing or relation of things behind the imperfect thing or relation.

The power and the habit of idealization are needed by all sorts and conditions of men. Idealization is an essential element in every kind

of productive work which aims at something more than bare acceptance of the world as it is. The farmer sees in a dismal piece of bog the possibility of a fertile meadow and sets to work to transform it by drainage and cultivation. He idealizes the bog in his own mind and then sets to work to embody this idealization in tangible form. The engineer and the architect see the ideal or social possibilities of certain conditions and certain materials in nature, and then work up these possibilities into some new construction—a marine engine, a bridge, a church, an office building, or a dwelling house. The decorative designer sees in his mind the ideal possibilities of harmony in a certain tone of russet and brown, and citrine, which he has seen here and there in nature or in art, and he works out this idealization in a carpet or a stuff for upholstery or dress goods. When the illustrator of a magazine story of country life wants to draw a hospitable farmhouse kitchen, he does not try to put down every board and every piece of furniture exactly as his model happens to look or exactly as he remembers seeing a certain kitchen; he calls up his in his mind the best and most characteristic air of such a homelike room, the ideal aspect of it, and draws that, showing such details of its building and furnishing as seem essential to bring out this underlying ideal. The painter of a great picture does the same thing. It is not to be supposed that Raphael's Sistine Madonna is a literal portrait of one model just as the photograph might have presented her had photography been invented. It is a noble ideal of motherhood made real by the skill of a master.

Idealization is thus essential to any and every form of human activity which has to do with the transferring of material nature to the needs of human nature. And drawing is the most simple, natural and fundamental means of expressing this idealization; that is, of expressing the product of a cultivated human individuality acting upon the material world, and using the natural world in the service of this individuality. Drawing in this sense as a feature of what is distinctly art education, becomes of the greatest and most vital importance in general education as a means of developing individuality. The study of drawing is practically the only feasible means the public school possesses for bringing out this essential, idealizing faculty in the individual, so that he may be equal to some useful and valuable service to society. Lacking it, he would necessarily be confined to the least attractive, most mechanical and most ill-paid kinds of labor.

Drawing, as a part of art education, develops the capacity to appreciate as well as the capacity to do. Rightly directed, it leads to a distinct preference for what is in good taste, that is for what

expresses a fine ideal, rather than for what is clumsy in conception and unskillful in execution. By doing this, the public school instruction is training the coming public to demand a better artistic quality in all industrial and art products, and so acts to raise the average level of social intelligence and prosperity.

To bring about these ends certain general aims and methods of work should be emphasized in a course of instruction in drawing as a feature in public art education.

The work in its various stages should be so adapted to the mental development of children of the various ages concerned, that it will be interesting and intelligible. It should also tend to guide the interest towards things that are best worth interest, and tend to develop personal power of the kind that is best worth having.

The study of drawing should be based upon study of form in objects in order that even the simplest use of drawing may be an expression of conscious thought about something, rather than a matter of perfunctory drill.

The objects whose form is thus studied should be carefully chosen for their interest, their beauty, and their importance, as bits of nature which are especially suggestive to the imagination, and examples of art which are especially beautiful and significant embodiments of human thought and skill.

Models of the pure geometric types of form, which underlie all the manifold variety of form in both nature and art, should be studied in connection with these selected objects, in order that pupils may learn to see how the type forms are the bases for all other forms. Having in the mind accurate and distinct concepts of the types, the pupil can more easily understand their numberless modifications. Having a clear understanding of the modifications, he can best express his ideas of them by drawing.

Both the form study and the drawing should be kept in helpful working relations with the other school studies, language, literature, arithmetic, geometry, geography, history, natural science, and manual training. The increasing command for drawing, modeling, etc., gained by the pupil through art instruction, should make him more and more able to draw and to model, wherever these processes will help other lines of work. On the other hand, the knowledge of the material world gained through the other studies, and the individual thinking incited by these other studies, should be utilized as largely and wisely as possible in the art instruction as mental material for idealization and art expression.

The work should enlist pupils' love of active, productive occupation, and through training for increased skill, ensure steady increase

in practical ability in the use of the senses, the mind and the hand. The spirit of the instruction should be such as to appeal constantly and wisely to the pupil's higher faculties, gradually developing his powers of insight into fitness and beauty of form, and fitness and beauty in the application and association of things. It should cultivate the creative imagination.

The work of the lowest primary grades should be held very gently and gradually toward technical standards. More emphasis should be placed in these grades on the acquirement of clear concepts of simple fundamental forms, and on the ready use of drawing and modeling as a means of self-expression, than on the draughtsman-like accuracy of the work done. But children should be led gradually, through the constant presentation for study of things really good in form and color, to enjoy what is good more than what is clumsy and harsh; and they should always be encouraged to express themselves with all the skill they have.

In grades above the lower primaries, increasing emphasis should be laid on training to personal skill as a means of expressing suitably the pupil's best thought. Examples of good drawing should be provided, from which he may learn ways and means of artistic expression which he could not otherwise gain unaided from his own small experience.

In the grades above the lower primaries the exercises should also be distinctly classified so as to cover the three great divisions of all art work, namely: Representation, or the appearance of form; decoration, or the ornamentation of form; and construction, or the facts of form.

The exercises in representation should give experience in studying the visual appearance of things under different conditions of position, distance, light and shade, and the relation to other things in harmonious grouping, that is, composition involving the pictorial representation of certain given objects in subordination to a given theme. The work should lead not only to personal ability in pictorial art, and to personal appreciation of pictorial art, but also to individual power in pictorial composition.

The exercises in decoration should give experience in studying examples of the most characteristic and beautiful ornament of different times and people, and in expressing, through drawing, personal understanding and appreciation of the art principles they embody. Exercises in decoration should also give experience in studying geometric figures, plants, and animal growth for decorative motives, and in working out these motives into original ornamental designs.

The work should thus lead toward creative and appreciative power in the line of decorative art.

The exercises in construction should give experience in studying from models and examples, the simpler underlying principles of industrial construction, and the accepted conventions of drawing as used in the industries. They should give experience in both reading and making working drawings, in working from a present object and in working from memory or an original conception of some object not present. The work as a whole should be of special service to manual training. It should lead toward intelligent understanding of the great industrial arts and toward personal ability in their service.

II.

Instruction in color should be associated with instruction in drawing, and be developed from grade to grade with special thought for suitability and harmony in its decorative uses. Pictorial work in color is at present rarely feasible in public schools on account of lack of time and funds.

Instruction in color should begin in the lowest primary grade, with exercises that appeal to the color sense of individual pupils and develop this color sense through personal, experimental use of color materials. It should avoid dogmatic dictation, but by accustoming the child to seeing applications of color and combinations of color that are artistically good, it should develop his taste gradually away from ugly crudities and toward beauty.

The use of colored papers is the best means now available of presenting and applying standards or ideals of color, scales of these standards, and combinations of different scales. Opportunity should be given in the study of decoration for the use of color, both in copying historic ornament and in the working out of original decorative designs.

III.

Art education in the public schools has still another field of work for the educator besides that of direct instruction in drawing and color. This other field is the artistic construction, the decoration, and the providing of proper surroundings of the schoolhouses in which instruction is given. This is a matter which is just beginning to receive some thought from the public, and some practical attention from school boards. Much more needs to be done to make this part of the art educational movement understood and its importance rightly estimated.

School buildings and grounds should be planned, not alone to meet economic and hygienic ends, but also to meet artistic ends, giving

pupils a constant example of what is meant by fitness to purpose, beauty of proportion, harmony of space, line and color, and appropriateness and beauty of ornament. The coloring of schoolroom walls and the choice of arrangement of pictures on the walls should be given thoughtful and energetic attention by persons competent to judge of such matters. Pictures and casts for schoolroom decoration should avoid both pedantry and inanity. They should be chosen with intelligent reference to the age and general attainments of the children who are to be made acquainted with them through daily companionship. At the same time, they should always appeal to the very best instincts and highest possibilities of these children in order to not merely entertain them, but to develop in them capacities of art appreciation which are at first only germinal.

Such practical experience as is already on record in regard to the educational influence of beautiful school buildings and schoolroom decorations is emphatically to the effect that these are strong allies of direct instruction in art. They are a positive and evident help in refining the manners, cultivating the imagination, and quickening interest in the higher, that is, the ideal side of life.

Respectfully submitted,

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*"ART NOT THE SERVANT OF SCIENCE BUT ITS
COMPLEMENT."*

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[REPORTED BY MISS CORA Z. PARSONS.]

In the beginning God created the heavens and the earth.

He said: "Let there be light. Let there be a firmament in the midst of the waters. Let the waters be gathered together and the dry land appear. Let the earth bring forth the grass, the herb, and the tree. Let the waters and let the earth bring forth abundantly the living creature. Let us make man in our own image after our likeness to have dominion."

"So God created man in his own image; in the image of God created he him.

"And God looked upon the work that he had made, upon all the work of his hand, and behold, it was very good."

In this text that I have chosen for this afternoon there are two points I would emphasize. First—God created the heavens and the earth, all living things and man. He looked upon *all* the work of his hand, and behold, it was very good.

Between the different works that God has made there can be no antagonism. All that God has made is good. Between nature, man and God, there exists a perfect and everlasting unity.

Since the universe began,
And till it shall be ended,
The soul of Nature, soul of man,
And the soul of God are blended.

The second point I desire particularly to emphasize is this: The self-conscious individuality of a moral being is the supreme product of nature. God created the material world and then created man in his own image to have dominion. In the working out of this immortal destiny man must first know nature, then he must make use of his knowledge; he must feel himself at one with the universe, and still know that he is nature's summit and crown.

Man's business in this world is not to live so that he may know, but to know so that he may live. The very highest faculty of his soul, the faculty that brings all others into requisition is his creative imagination, the power that makes ideals. Through this faculty man like the divine father creates; he decomposes all creation, gathers and

arranges material, and with power implanted in the secret depths of his soul, he creates a new world.

I agree with Spencer that art must be married to science before the best results can be produced.

In true marriage there is no service, or rather there is the highest service—a help-mating.

Between science and art there exists a close interrelationship, a perfect unity. They are not antithetical but complementary.

Science furnishes a strong foundation of accurate knowledge upon which art may build, and art crowns the definite reality of science with the halo of spirit.

Man studies nature's laws and substances, her order, her symmetry, her grandeur. This we call science. Through art he makes these subservient to his creative power, interpreting, transforming, purifying nature, and endowing her with his own genius, through his spiritual insight.

The object of elementary science in our schools should not be a storing of the minds of children with numerous facts concerning nature. The high aim of all study of plants, animals, and minerals, should be "a consecration of nature, through the revelation of spiritual ideas."

It is the teacher's pleasant task to see that the child's ear is attuned to nature, that his imagination is kindled at her suggestive mysteries, that his heart throbs responsively to the sweet influences of her great magazine of forces, and that he apprehends the infinite glory that crowns and transfigures all finite objects.

The expression of the study of elementary science should be more than mere material representation, than imitation by painting, modeling or drawing of the outlines and limitations of objects and the detail of their structure.

The expression should be art; it should be creation, idealization.

What the child sees and expresses in nature should not be herself alone, but herself plus his own sensibilities, spiritual as well as intellectual.

The expression that is inspired and molded by the art impulse is the highest and strongest expression.

In a single historical play of Shakespeare, a play that can be read or performed in a single evening, Shakespeare has put in one great art movement, the essential character of a great epoch of history. Possibly no word that is put into the mouth of king, queen or cardinal was ever actually uttered, but these words show us what these people stood for in the world and what they did better than all their words and deeds, could they be recorded.

You might open an encyclopædia of facts and read some statements regarding the life and death of Duke of Wellington. You would read that he was buried in Westminster Abbey, that a long and imposing funeral procession did honor to his memory and that the English people mourned the death of their hero. You might be interested in these facts and you might not. Unless for some purpose you had been searching for them you probably would not.

Should you open a volume of Tennyson and turn to his "Ode on the Death of the Duke of Wellington," how different would be your feelings. At one moment with his tripping measure he makes you fairly hear the hum of voices and the patter of feet, of the busy throng constantly surging in the vicinity of the Abbey. The next instant your thought is suddenly changed, and you stand in the majestic presence of death, and feel the solemnity of the tomb. The longest and saddest sounds in the language are chosen in the description of the long, sad funeral procession. Now you glory in the victorious conquest of the hero, now you are in the very heart of battle, and again you are lamenting with the mourning nation.

The facts you read in the poem are the same as those of the encyclopædia, but in the expression of the facts Tennyson put his own personality, and the facts plus the soul of Tennyson form an immortal ode.

William Hamilton Gibson studies nature in her various moods and aspects, sees her unity and perfection and ignores her defects. He portrays her to us not as she actually is in severest detail, but according to that ideal of perfection toward which she constantly strives. Thus he becomes nature's interpreter. He adds a new beauty to nature, the beauty of his own love.

Mr. Gibson is much more true to nature than he would be if he slavishly copied her in all the details of her structural imperfections. Such expression as his, it would seem to me, is the very highest scientific, as well as artistic expression.

There are two kinds of truth, truth of structure, and truth of aspect; one is as great and essential a truth as the other.

I might study in detail the form, color, and arrangement of this spray of roses. I might represent accurately every vein, veinlet and serration of the leaves, and every detail of the rose. I would thus represent the truth of structure.

When I look at this spray and wish to portray the effect of the whole upon my mind, I do not see the multiplicity of details. The truth of aspect differs widely from the truth of structure. If I represent all the details I cannot possibly show the life, growth and beauty of the spray, nor the effect it has upon me. However, the truth of

aspect includes the truth of structure, as I could not make an artistic drawing showing life, growth and beauty, and my own thought, without understanding the structure. Thus it would seem that art assimilates science. The art spirit counseleth us to seek the ideal, to seek it always. The teacher should aim to have the children study nature in her very highest aspects. All material used should be the finest obtainable, all thoughts presented, the noblest possible.

Recently I have been interested in making a collection of beautiful poems to use in connection with the nature study. I have been surprised to find how many of those being used in the schoolroom are undesirable.

For instance, there is the popular spring song of the dandelion, which is probably familiar to many of you.

"There was a pretty dandelion
With lovely golden hair
That glistened in the sunshine
And in the summer air.
But, oh, this pretty dandelion
Soon grew quite old and gray,
And, sad to tell, her charming hair
Blew many miles away."

Why sad to tell? If the dandelion is fulfilling its mission, if the little seeds are flying away to plant themselves where they may produce new glory of gold and green the next spring, why sad?

Last week I was looking over, with some teachers, a number of poems that had been gathered from various sources. Among them was this.

CATERPILLAR.

"I lie on the ground, and the children say,
'You ugly old thing,' and push me away."

COCOON.

"I lie on my bed, and the children say,
'The fellow is dead,' and throw me away."

BUTTERFLY.

"I spread my wings, and the children cry
To make me stay, as I rise and fly."

One teacher said, "I shall copy this and use it in connection with our study of the butterfly. I can combine the art instruction with it, and have the children draw the caterpillar, cocoon, and butterfly when they write the poem."

Another teacher said, "The thought is not ideal, children should study the best. If art is an expression of human thought and feeling, I am deeply concerned about the feeling. If I use the poem I shall first have to change it."

She took her pencil and wrote:

CATERPILLAR.

"I creep on the ground, and the children say
'What a curious thing,' as I wander away."

COCOON.

"I lie in my bed, and the children say,
'What a strange cradle this!' and lay it away."

BUTTERFLY.

"I spread my wings, and the children cry,
'Oh see, 'tis a beautiful butterfly!'
Soaring on high, I take my flight,
And the children gaze till I am lost to sight."

Note the difference. In the second piece the caterpillar is creeping on the ground, instead of lying on it. The active moving object is more likely to attract the attention of children than the still object. The children do not say "You ugly old thing," and push it away, but, "What a curious thing," and without harming it, they let it follow its own sweet will and wander away. They do not say about the cocoon "The fellow is dead," and throw him away, but "What a strange cradle this," and protectingly lay it away. When the wings appear, and the glory hidden in the cocoon becomes apparent, the children do not try to detain the butterfly but allow it to fly. As it takes its flight heavenward, the thought of the children is uplifted as they gaze and wonder.

The teacher should always present the ideal and the children should be led to seek it. When they bring into the schoolroom specimens to draw or paint, they should be the most beautiful specimens to be found; they should then make the most beautiful possible arrangement, and finally imagine something still better, and represent the image that is in their minds.

I feel that there are two dangers which at present assail us. One is the contrasting of the work of material nature with that of human nature to the disparagement of the latter. We hear it frequently said that God made the country and man made the town, with the implication that what man makes is of little account. I should say that God made the country and through man made the town.

I think we are blind to the plan of the universe if we do not recognize man as the crowning glory of the Creator's work, and see in the realization of man's spiritual ideals a clearer expression of the Divine than in material nature. Man always can imagine something better than what he sees materially produced before him. If he could not, I doubt if many of us would be present at this meeting today, as the only means of travel that nature affords are the back of a horse or

mule, and the top of a log. If he could not, man would still be seeking shelter in caves and hollow trees, and the Parthenon, the Coliseum, the Gothic cathedrals, and the beautiful "White City" would never have been erected. If he could not, Raphael would never have painted his "Sistine Madonna," that stands not as a representation of any one woman but as the type of womanhood.

If he could not, the symphonies of Beethoven, the operas of Wagner and the songs of Mendelssohn would never have been given to the world.

Children should be led to study nature lovingly and reverently, but we should remember that they are the "heirs of all the ages" and it is a large part of our work to bring them into their inheritance. The children should know and appreciate the best that man has done in his majestic march through the centuries.

Nature never interprets herself. Man must be her minister. The children cannot gain the greatest possible good from nature study until they study in connection with nature man's highest interpretations.

Every child born into the world in the image of the Father has some power of creative imagination; this is the power above all others we should seek to develop in the children.

The other thought which at present seems to harmfully influence our art study is an idea that the child needs little training or guidance, that the teacher's full duty is to keep his attention called to natural objects and give him opportunity to represent, and that somehow, sometime, he will gain the power of good artistic expression without any definite planned study.

I believe with Theodore Child that great works of art are not created in the propitious fever of a happy moment, nor are they composed of mere felicitous suggestions of nature and amusing notes of passing sensations but are rather the products of the long efforts of an imaginative and receptive mind tenacious of its ideal.

I think many of us have become so afraid of impressing ourselves upon the children, that we fear to help and guide them. No one can wish the children greater freedom than I. The children must be free, but is there not danger of confusing healthful freedom and spontaneity, with wayward ungovernable impulse? To attain full freedom we must first serve. Children must learn to do the right for the love of the right, and find in it their supremest joy. In the words of Goethe,

"He who wills the great must serve the stringent ought,
Only such obedience proves the Master Soul,
Law alone allows us Freedom's conquering might."

SHALL ART BE THE SERVANT OF SCIENCE OR ITS COMPLEMENT?

BY M. V. O'SHEA, SCHOOL OF PEDAGOGY, BUFFALO, N. Y.

There must have come sudden and great change over the interests of mankind that people in our day think it necessary to debate whether art should be the honored companion rather than the humble servant of science. Not long since, as time goes, it would have been more in place to ask if science could produce any grounds for its existence because of the service it might render art. It is a matter of no small wonder that in the passing of a century or two the methods and results of inductive science should have come to so largely influence our common thought and feeling; but the most dull of sight among us can easily see that the movement set in motion by Francis Bacon a few hundred years ago has indeed penetrated into the very vitals of modern civilization. Our ancestors of no remote period were content to hold converse with nature at a distance, to view her forms and processes half distrustingly, not at all confidentially or frankly. They were only partial worshippers of the actual, as this was discerned by the operation of the senses, but they rather centered all their hopes and fears around the supersensual, the metaphysical, the mysterious. To our forefathers, earnest and reverent people that they were, the universe consisted of two worlds separated by an impassable barrier—the world of spirit and that of matter; and man was so unhappily constituted as to hold in his nature elements of both, which warred continually one against the other. The world of matter comprised the regions of darkness and untruth. It was the habitation of all things evil, and there dwelt therein no goodness or purity. The world of spirit was its opposite, and it was man's highest duty as well as his privilege to so order his earthly conduct that he might some time become a tenant of these spiritual realms. So it happened that men avoided contact with nature, in the hope thereby to gain closer communion with the things of the spirit; and in this hope were the beginnings of religion, philosophy, poetry, art—all one and the same in essence, and differing only in external attributes. Art in its stricter sense became principally the medium of graphically representing the religious hopes and fears of mankind; and, so far as it regarded nature, it did so haltingly and with suspicion, for in her secret vials were concealed the poisons of spiritual life. That the visible objective universe was the outward manifestation of divine love and truth;

that in its wholeness, if not in its minutest parts, it contained rich harmonies for the eye and ear; that everywhere—above, beneath, in the stars, the flowers, and the rocks—there were written order, symmetry, beauty, these things were not possible, much less probable. So art did not concern itself with them particularly, because it could not find them; it did not believe in them.

Now what a transformation is apparent! How ardently and carefully men are striving to woo from nature her deepest secrets, her most profound truths! And every day the wonder of it all grows, for greater order and harmony are seen, more of purpose and love are visible, the realm of beauty widens in all directions. The world seems to believe today that if it waits and watches it shall behold the truth, and the truth shall make it free. Nor are we required longer to view nature in the simpleness of our native vision, or listen to her melodies with unaided ear; but Providence has added unto us complementary organs in the lens, the photographic plate, and the electric wire, which have so vastly extended our powers that we discover truths now where formerly nothing but death, disorder, and decay were visible.

All these things are being gained through a well-nigh sacred regard for exact truth concerning not only objective but also human nature as revealed in the individual mind and in history and society. This new interest we have called science, and its great passion is to be accurate, to get real facts. Sometimes it seems heartless in that it does not apparently care how what it finds will immediately affect human life, only so that it be a faithful account of nature's constitution and progress. There must be no feeling mingled in with the items of this account, nor any of the imagination; it must be simply a record of nature's ways passed through man's senses.

But now, what of art? Has this mighty revolution which science has introduced into human life changed its stature? made it less a necessity? rendered it a servant instead of a master? Let us ask first what meaning we are to put into the term art. And who shall be bold enough to try an answer? For is not the realm of beauty, in which art dwells, forbidden to all intellectual excursionists, as the psychologist, the biologist, and the scientist of every stripe? Beauty, we are told, must be felt; it cannot be analyzed, dissected, talked about. We must admire, must worship, not attempt to define. There are those in whose eyes beauty seems to be more beautiful because it is thus mysterious and unknowable. We are told again that that part of the human soul which apprehends the beautiful, which appreciates the æsthetic, is subject to no law, but is spontaneous, is intuitive; that while the coarser elements of the mind have to do with perception and

reason, these higher portions form the habitation of pure feeling and imagination which admit of no classification and little description without doing violence to their æsthetic character. So while the psychologist fearlessly explores all the other regions of the mind, he makes his approach to this part with much trepidation, because, perhaps, of this strange sentiment which has from aforetime encircled it. It has come to pass on this account that the layman's comprehension of art has been exceedingly vague and indefinite, and he has little understood the masters when he has sat at their feet for instruction. The masters themselves have felt this, and one of the greatest of them has grieved that "it has been the fate of arts to be enveloped in mysterious and incomprehensible language.*

"If," he says, "in order to be intelligible, I appear to degrade art by bringing her down from the visionary situation in the clouds, it is only to give her a more solid mansion upon the earth. It is necessary that at some time or other we should see things as they really are, and not impose on ourselves by that false magnitude with which objects appear when viewed indistinctly as through a mist."

In the assurance of these strong words let us here hazard some definitions of art from the psychologist's point of view. It is first, and in part, an interpretation of the facts of science from the standpoint of human needs and human hopes, not science in its details, perhaps, but in its larger and more significant aspects. The statement may be made without argument at this time that the human mind is the highest product of the Creator, and that all the facts of nature have a value for it, either hopeful or fearful, worthy or unworthy, beautiful or ugly. Science gathers the facts faithfully, truthfully and without distinction as to their character, and the soul, beholding them, expresses through art its feeling toward them, the meaning which is suggested by them. Science does not put interpretation from the soul's standpoint upon any of its results; it does not aim to—it leaves all this for art. Science, then, goes forth as the fact-gatherer, and art follows with cheerful step as the interpreter; and for interpretation it chooses that which is most uplifting, most inspiring.

But art has not in the past always regarded this as its proper mission, and it is not universally so considered in our own day. There is an art in our midst which frees itself from, even sets itself against, all fact gained through sense, and depends alone upon the issues of the imagination. It does not interpret anything but the conceptions of unguided fancy, which, while natural, may still not be according to nature. Such art defies the imagination, and, reposing absolute confidence in its products, seems blind to the evident truth that given

*Sir Joshua Reynolds' Works, Bohn's Standard Library, Vol. I, p. 408.

free reign it may bring forth the most unworthy, unlovely, unreal conceptions under the stimulus of fear, of ambition, or of sensuous emotion. Can one not say that much of the art of the past has been exceedingly trivial because it was concerned, not with universal truth, but with the wanderings of individual antique fancy? The art of our forefathers was, doubtless, in a large degree characteristic of their views of nature and life, but the scenes change rapidly in these times. The age of mythology grows dim in the past, while the tide of scientific truth already surges round us; and art should help, not hinder, humanity in freighting its burdens safely into the broad sea. It is sometimes said that art should portray that which will delight the mind, even though no counterpart, or even likeness, may exist in objective nature; but it devolves upon those who make such statements to show that what is truthful to the plan and order of the universe, although not merely a copy thereof, is not at the same time a more delightful and acceptable nourishment to the mind than that which is purely fantastic.

Art is then the complement of science indeed, but cannot be independent of, much less indifferent to it. There seem to be those who feel that if art keeps company at all with science it must by such association soon become mechanical, and so lose its power to inspire and uplift human life. We hear much nowadays of this mechanicalizing the soul by scientific methods and results, and it would appear as if there were some irremediable conflict between the conception of order and regularity in the universe on the one hand and mental freedom on the other. This is not the time or place for a psychological examination of mental or moral freedom, but it may not be inappropriate to remark in passing that the highest form of spontaneity seems to be that which is subject to some law rather than that which is without guide, without control, the result simply of undirected fancy. Freedom consists, at least in part, in the escape from uncertainty, from indeterminateness, and seeks refuge in the establishment of definite, habitual ways of action. If art, then, in the hope to preserve its spirituality divorces itself from that regularity and orderliness which is seen everywhere in the universe, just at that time it becomes unnatural and is no longer art in the highest sense. We would not, if we could, return to the age when the imagination reigned supreme, when the pictures of individual fancy rather than the more universal products of sense were chosen as the most worthy objects for artistic representation.

The artist of today, then, must be a scientist, but more than one — never less than one. This must have been Ruskin's thought when he said that however far above science art must still comply with all

the conditions of science. The artist should be able to see in a drop of water, a blade of grass, or a twining tendril, beauty and spiritual meaning that the common vision can never discern, or the average heart appreciate without his aid. His high aim must always be to see through phenomena into the essence out of which they spring. His thought must go from the attribute to the essential, from the appearance to the reality; but he can hope to do this only by first comprehending accurately the phenomena, the attribute, the appearance. Perhaps some may still think, as it has been thought in the past, that an art which thus has its root in science will afford no opportunity for the expression of individuality, since all artistic endeavor must be run in a common mold. The psychologist can have no fear of such a calamity if the artist courts the acquaintanceship of science, but he beholds rather innumerable situations in such proceedings for the display of personal thought and feeling. He sees that different minds interpret the same scientific data from varied points of view, and yet each being individual, may at the same time be accurate and truthful. One person viewing the trees in a forest may calculate the amount of cordwood therein; another may see an arboretum there, while still another may be impressed alone with the wonderful evidences of life and power, and with the marvelous adaptations of things to definite ends and purposes. All are scientific, but each is individual, for he has interpreted by that which is within his own personality. Truth for the one may not natively be truth for the other, but it may become so when art skillfully calls it forth from its secret places.

But while art is thus individual it is something more than mere self-expression, because it has a higher and more careful aim than the oftentimes unworthy one of simply making visible anything and everything which originates within. It is easy to perceive, of course, that what is expressed through art, if not exactly imitated, must be shaped and fashioned by the constitution and fabric of one's mind and heart; but there is some distinction between those products of expression that are wholly subjective, due solely to the stirrings of fancy, and those which are the results of a careful scrutiny of scientific data in order to discern in their connections realities no hint of which they give us in disparate form. In this latter type of art we indeed have the revelation of self, but have a version of universal truth as the outcome; while in expression that simply gives outward shape to the pictures of imagination we may have the most trivial and pernicious error as we doubtless also sometimes have the most sublime truth. It is here that the psychologist and the artist occasionally part company, for the latter often attaches the mark of fundamental truth to all the operations of the imagination. He holds that this faculty apprehends

spiritual realities intuitively, and so he regards all the children of fancy as messengers from the realms of wisdom; while so far as the psychologist can discern few great truths of any kind come out of the mind unless the elements, the ingredients thereof have been put in through the experience of sense. Not that truth goes forth from the mind in the exact manner in which it has been received, but it must have some foundation or suggestion in sense percepts; and then the soul viewing its data may weld distant things into unities and endow them with feeling, when, indeed, they become most worthy objects of the highest artistic expression. But the order is from observation to expression, from science to art, rarely if ever the reverse.

Thus far we have regarded art as interpretative merely, and have left ourselves but little chance to speak of its creative aspects. The evident plan of the universe would not be consummated if man's spiritual activity was forever kept within the narrow confines of observation and interpretation. All life, past and present, tells the story of evolution, of progress from lower to higher things, at the summit of which is the mind of man that must have been fashioned in the likeness of the Creator of nature; and this endows him with the sublime privilege of participating in creation itself, of helping on the great struggle of the universe to ever show itself in more perfect forms. Man need not, perhaps cannot always be content with nature as he finds her, even though in most of her parts she reveals marvelous beauty and perfection, which attributes doubtless always appear in her totality, her wholeness. But the fragment which is visible to the sight of each of us at any moment may not be perfect, either in use or beauty; and the human soul beholding the imperfection may discern what nature was meant to be and what in its perfectness it would be. Nature may indeed locally and momentarily be ugly, but man's needs demand universality and permanence of beauty. Nature perhaps unhappily is not permanent in details, never final; no sooner does she reach perfection in any of her aspects than she returns rapidly again into decay and nothingness, to reappear in still other forms. So soon as the flower reaches consummation of beauty does it return back to earth to become the nutriment of others of its kind; and so the process goes endlessly on. But the soul of man must forever feel discontent in view of this incessant change; it must long for what is triumphantly good and beautiful, regardless of the wreck of ages. Here we see the field for creation in art, to perfect and improve upon nature, to make everlasting those goods of the spirit that in nature are transitory and only hinted at.

But can this creation go on, neglectful of what nature is? Or shall the artist, by diligent research into the exact constitution of nature

discover what she was intended to be, and then become a creator in supplying her deficiency? Creative art, it seems to the psychologist, should build upon what is by completing and perfecting it, should give not nature but what nature inspires; and taste as the trusted guide is seen to be only clear, deep insight into nature's eternal types born of close communion with her invisible forms. Taste leads the artist to complete harmonies and beauties which have been hinted at in the life around him and in his own mind and heart; to fill in the large outline shown in the constitution of nature. The more thoroughly he appreciates the harmonies that already exist, and the more clearly he sees the outline, the more surely will taste guide his thought and feeling to create that which will contribute to the uplifting of the individual and the race. As Sir Joshua Reynolds says: "The beginning, the middle, and the end of everything that is valuable in taste, is comprised in the knowledge of what is truly nature; for whatever notions are not conformable to those of nature, or universal opinion, must be considered as more or less capricious."*

We should say of art here, then, as we have said of it before, that it is the complement of science, but is not independent of it. What science finds in its patient searchings, art must accept as material to be wrought upon, fashioned and completed to satisfy the affections and aspirations of the soul. In this way art can never receive anything but good from science; like religion, it has nothing to fear from a most careful and reverent study of the expression of the divine in nature.

Now, finally, what shall be said to the educator who seeks to employ both science and art in the daily instruction of the young? Shall these branches go their own way, each independent of the other, as they have principally done in past years, so far as they have been given free course at all? It may be pardonable to say here dogmatically, that whatever else has come to stay in education, the permanency of science is reasonably well assured. This "Cinderella so long hidden in the chimney corner while her proud sisters displayed their tinsel in everybody's eyes" will not easily be released, now that she is at last revealed. In her effort to always be exact, to be definite, to show the perfect form and stature of things, to decipher parts and their relations to each other, to see the adaptation of structure to function—in the effort to show these things, science must ever have art, so-called in our popular language, in the forms of drawing, modeling, and painting as her willing handmaid. Art is here purely imitative, representative, and as a means of exact graphic expression may be of the most valued assistance to science which it should always

*Sir Joshua Reynolds' Works, Bohn's Standard Library, Vol. I. pp. 414-415.

count a privilege to serve. Art is by no means debased, but instead most signally distinguished when it is thus made the bearer of messages of truth to humanity; its proud name will not suffer dishonor, nor will it lose its æsthetic character by such service.

But art instruction in our schools need not, must not stop here. While it may indeed most profitably imitate nature in all her details, it may also interpret her by ignoring these very details and presenting her in her essential attributes. Details often cloud the sight for loftier visions, and interpretative art must sweep them away so that the glorious forms of truth may stand revealed. Nor is this too high or too broad an aim for our schools, nor yet impossible or impracticable when the basis for interpretation is laid in a deep, thorough knowledge of science in its broadest meaning. But without this first intimate acquaintanceship with nature, interpretative art will interpret nothing but individual fancy, which may or may not (we fear the latter) embody truth in universal form.

Finally, and most important of all, the school must provide opportunity for the development of the creative activity of the young, not at the beginning, but before the end of their school days, when the pupil has felt the pulse of nature and knows her conditions, her plans, and purposes, and when feelings for the welfare of humanity have throbbled in his breast and brain. There can be no creation worthy of the name until these conditions are in a measure realized; but when they are, creative art may become distinctly social in its aims rather than personal, for then the individual, comprehending truth as the peculiar fabric of his mind and heart give him insight, may picture it forth and embody it in concrete form for the benefit of those who dwell with and who shall follow him.

DISCUSSION.

[REPORTED BY MISS CORA Z. PARSONS.]

MR. HORACE BRIGGS, Buffalo, N. Y.—I wish to take issue with the speaker on the question of cultivating the imagination. In Japan, the children are taught in their earliest childhood to draw with the brush and to see harmony, relation, and proportion. They are continually surrounded with beauty in art and nature. Their museums are constantly used by the children and their gardens and flower arrangements are the most beautiful in the world; the latter is given to the pupils as a matter of instruction. The massing of flowers is never seen, but two or three branches are arranged in a vase. In the manufacture of china the designing is done directly from the flower and in a great measure by the children. Educate the young people in the appreciation of beauty if you would have good taste in America.

MR. J. S. CLARK, Prang Normal Art Classes, Boston, Mass.—What has been

so well said here at these meetings is a great encouragement to those who have been trying to solve the problem of art in general education. At the time of the organization of this department it was a difficult matter to get the general association to recognize its importance. Today emphasizes the importance of this work. We have with us at this convention both the artist and the professor to give us their aid and encouragement. Mr. Turner has presented in his paper the possibilities of bringing the child into closer relation with the interpretation of nature by the artist, by surrounding him with all that is best. Mr. O'Shea has so ably placed before us the balance between art and science. We need the union of the two. Nature must be idealized by the human mind and transferred into the realm of the spiritual and then it becomes art.

DEPARTMENT OF MUSIC EDUCATION.

SECRETARY'S MINUTES.

FIRST SESSION.—WEDNESDAY, JULY 8, 1896.

The department was called to order at 3 p. m., Wednesday, in Prospect Avenue Baptist Church by Professor Joseph Mischka, Buffalo, N. Y., who, after extending a cordial welcome to all, introduced the President of the Music Department, C. H. Congdon, Supervisor of Music, St. Paul, Minn.

After brief remarks and some important announcements, the President proceeded to carry out the programme by introducing Dr. G. Stanley Hall, President of Clark University, Worcester, Mass., who delivered an address on "Natural Methods in Teaching Music to Children."

At the conclusion of Dr. Hall's address, Miss Florence Marsh, Detroit, Mich., made some remarks on the same topic, relating experience with children in first year's work.

The paper of Dr. Hall was discussed by Mr. F. E. Howard, Bridgeport, Conn.

A paper on "How Good Music Makes Good Citizens," was read by Mr. Frank Damrosch, New York City, and discussed by Miss Sara L. Dunning, New York City.

Professor Joseph Mischka, Buffalo, N. Y., read a paper on, "Our Experience in introducing Music as a study in the Public Schools.

Mr. P. M. Bach, Colorado Springs, Colo., presented a short response.

"Music in Education" was the next paper, read by Mrs. Emma Thomas, Detroit, Mich.

The President named a Committee on Nominations as follows:

Miss Sara L. Dunning, New York City, N. Y.

Mr. O. E. McFadon, Minneapolis, Minn.

Mr. C. W. Weeks, Ottawa, Ill.

A motion was made and carried that a question box be provided as a receptacle for practical questions, said questions to be answered at the round table session.

A motion carried, also, to change the hour for convening to 2:30 p. m.

Meeting adjourned.

SECOND SESSION.—THURSDAY, JULY 9, 1896.

ROUND TABLE.

Meeting opened at 2:30 p. m., with President C. H. Congdon in the chair.

A motion prevailed to proceed to the discussion of Dr. Hall's paper.

The discussion was opened by Mr. N. L. Glover, Akron, Ohio, who said that

music-reading should begin at once in the young child's education; that both rote and note should go hand in hand.

Great interest was manifested as shown by the large number participating in the discussions. Dr. Schaffler, New York; P. C. Hayden, Quincy, Ill.; H. E. Holt, Boston, Mass.; N. Coe Stewart, Cleveland, Ohio; A. J. Gantvoort, Cincinnati, O.; Miss Sara L. Dunning, New York, and many others spoke upon the question.

At the conclusion of this lengthy discussion, the questions from the question box were assigned to individuals for personal answers and also for general discussion.

THIRD SESSION.—FRIDAY AFTERNOON, JULY 10, 1896.

Meeting called to order by President Congdon at 3 p. m.

Address by Col. F. W. Parker, Chicago Normal School, on "The Psychology of Music."

A brief discussion followed by Mr. F. A. Lyman, Syracuse, N. Y.

Professor Samuel W. Cole, Boston, Mass., read a paper on "Thinking Sounds Directly and Indirectly."

The paper was discussed by Miss Julia E. Crane, Potsdam, N. Y.

Mr. O. E. McFadon, Minneapolis, presented a paper on "The Development of Music Theory Through Practice," with an illustrative class.

Professor N. Coe Stewart, Cleveland, Ohio, furnished a "Report of Committee on Children's Songs," and illustrated his paper by having certain songs rendered by a quartet of mixed voices.

Dr. William T. Harris, United States Commissioner of Education, presented his ideas on children's songs and made a request to have collections of classified songs for children sent to the United States Bureau of Education at Washington.

Mr. C. W. Weeks, Ottawa, Ill., *Review Critic*, made some excellent suggestions in his review of the entire programme.

The Committee on Nominations submitted the following report:

For President—Mr. F. E. Howard, Bridgeport, Conn.

For Vice President—Miss Julia E. Crane, Potsdam, N. Y.

For Secretary—Mr. C. W. Weeks, Ottawa, Ill.

The report was adopted, and the above named persons unanimously elected officers for 1896-'97.

The session then adjourned *sine die*

. LINN MARIE HAWN, *Secretary*.

PAPERS AND DISCUSSIONS.

NATURAL METHODS IN TEACHING MUSIC TO CHILDREN.

BY F. E. HOWARD, SUPERVISOR OF MUSIC, BRIDGEPORT, CONN.

I imagine the discussion about songs or note singing for primary classes will cease when note singing is made interesting; when, for instance, the symbols of music language have been as carefully analyzed, and are presented with the same understanding and skill as are the symbols of spoken language. There is nothing intrinsically dull or difficult in first steps in note reading. In fact, primary classes can be led to feel as great interest in singing by note as attaches to the constant repetition of songs, especially the stupid ones, and there are some stupid songs. Songs are the literature of music; they are music stories; they have a place, and the most important one in child education, but it is not through their use that children acquire the power to think and translate into song the symbols of music language. We must teach notes, and teach them as sentences; words, letters, speech sounds, etc., are taught in language. When teachers will spend the time they now give to learning how to present the subject, to the study of music itself; when the subject-matter to be taught in music is as familiar to them and as well classified in their minds as that which they have to handle in English, numbers, etc., we shall hear no more of the undesirability of note singing for little children. Rote songs will retain their place; but it will be analogous to that occupied by the story, in the teaching of history, science, and morals.

Action songs are to be commended so long as the action part does not destroy the musical effect. Of course we understand that in all discussion of song singing it is implied that they are sung in a musical manner; but, as a matter of fact, under existing conditions, are they? Of what sort of value upon the child's development are beautiful words, set to equally beautiful music, and illustrated or not with appropriate action, if sung as badly as we have all heard them sung? Possibly under our own supervision. I recollect going into a room a short time since where the teacher, a good one, a motherly soul, who is always anxious that her children should be happy, asked her class in a very pleasant manner if they would not like to sing that song about the robin, and thereupon without further preliminary some child,

probably the noisiest and most unmusical one in the room, set up a shout, and they sang—for it must have been singing—what else could it have been?—all about the little robin redbreast, the harbinger of spring, caroling forth his notes of love and joy to the fine weather and to his mate; and all this with a howl like unto the braying of donkeys. Now, what is the æsthetic and moral value of that sort of thing? Is it the joyous outpouring of the natural feelings of childhood, as those say who believe that all soft singing, if required of children, is a wicked repression of their natural instincts. Very likely. We can trace in the growth of the child the evolution of the entire race. Barbaric shouts, clangs, beating of drums and tooting of horns is as dear to the boy of to-day, the embryo man of the nineteenth century of civilization as it was to his far distant progenitors. Children undoubtedly love noise; but this phase of the physical and mental growth of the child must be taken at its real significance, and should not, and I imagine except in music does not, often blind us to the value of proper restraint in training and education.

The singing in the room of which I have spoken was as barbaric as a chant of savages, and its influence was no more refining than the beating of the tom-toms at a war dance.

Music in the schools is very simple, so far as the theory goes. I suppose that a studious person, entirely unacquainted with musical notation or theory, might learn all that we teach of either in a public school music course, in the course of a few hours. School music must be worked out in practical ways, on the lines of reading and of singing. By singing, in this connection, I mean the vocal art, the use of the voice, with all the knowledge and skill implied on the part of the teacher, and the far-reaching results to the pupils.

Now, while it is a matter for congratulation that educators are beginning to think of music as a necessary part of the school curriculum, and to measure its worth and estimate its possibilities from their standpoint, there is another class of people who are to have their say: the musicians—the organists, pianists, choral conductors, voice teachers, singers—a class who are very much alive, very much in earnest, not composed of those who are good for nothing else in the world, as is popularly supposed, but having in their ranks many men and women of intelligence and broad culture. They have hitherto paid very little attention to public school music, but there are many signs of awakening interest. They are a class who have the courage of their convictions, are frank and outspoken in their criticisms. In fact, I am not sure but that there are those in the profession who seriously consider it their mission to criticise; but, be that as it may, school music must meet the interested criticism of the professional

musician and the musical cultured. It must disarm it if hostile. It must win the approval of this class, and I think it can do it when the methods employed in school music are consistent with and parallel to those used in teaching music generally. And when the results in the use of the voice and in singing are consonant with the highest vocal standard, within its scope, in theory, knowledge of musical literature, and care and training of the voice, school music must eventually be judged by musical standards. Pardon this apparent digression, but it permits me to come to the point at which I have been aiming from the start, which is that only through excellence in art is musical culture promoted in the school and the community. The best musical literature may be most exasperating in its effect if rendered in a ruthless manner. In a word, school music is not to be made satisfactory alone by nicety of method or wise choice of literature, though both are of course absolutely essential; but it must be satisfactory in the results it produces in the power to read music, and in the results it shows in the care and training of children's voices. We deal with the voice at a time when it is physically immature and delicate, and it must be managed in all school singing in the light of physiological laws, and not by whim or a chance.

It will purify the child's nature and beautify his life if the music which he hears day by day, or in which he takes part, is beautiful in tone and general effect. What awakening of the soul, except to discord, can be expected of harsh, noisy rendition of even excellent music? What except lasting harm to both individual tastes and natural powers can be expected from misuse and forcing of children's voices for the whole period of their school life? It is the way in which music is taught that makes it a holy beneficent influence upon the lives of children, or the contrary. Let low ideals of music performance become fixed in school life, and in the majority of cases they will remain unchanged. On the other hand, if high ideals of beauty of tone, of shading, expression, of musical excellence generally become fixed during this period, the foundation is laid for future appreciation of good music which can never be shaken.

HOW GOOD MUSIC MAKES GOOD CITIZENS.

BY FRANK DAMROSCH, NEW YORK CITY.

It may seem at first glance, a long step from good music to good citizenship, but I shall try to show, nevertheless, that there is a close connection between them, and that the former can exert a very strong influence upon the latter.

To do this, let us first establish what we understand by a good citizen. Shall we be satisfied with the definition: "One who obeys the laws of his country, casts his vote at the polls, and attends the primaries?"

It would, indeed, be a vast improvement on present conditions if every one fulfilled these duties, but, as this is an ideal which we can never hope to reach as a nation, we might as well set a higher standard for the individual citizen and say: "A good citizen is he who tries to develop his own natural faculties to the highest extent, both for his material and spiritual betterment and, in so doing, raises the moral standing of society or state in which he lives."

It seems to me that, in a republic, the latter definition is the better one; for, what profits it that the citizen obeys the laws, if the laws themselves are bad. Is it not far more important that the people who indirectly make the laws be trained to higher perceptions of morality, right, and justice? Were each individual to strive to attain the best that is within him and then to devote this best, in union with his fellows, to the benefit of the political whole—his town, his state, his country—of which he forms a part, we would then have an ideal social and political condition such as could be obtained in no other way.

We look to education to bring about this state of things by the careful development and thorough training of the young. That the state recognizes the importance of this work is evidenced by the liberal expenditures for public schools, colleges, libraries, etc., but it is by no means certain that the desired results have been obtained.

Does any one claim that our voters, today, are more enlightened, more honest, more incorruptible, than those of a century ago? Are our legislators more capable, more disinterested? Is the public standard of morality higher? Is there a truer spirit of patriotism now than there was in the time of Washington? Even if we claim to be as good as we ever were, can we show any improvement as men, as citizens? Alas, I fear we cannot! Our country has developed; our

material existence has, perhaps, improved; but our moral progress has not kept pace with the material. Why, then, is this the case when so much attention is given to education by the state? The only conclusion we can arrive at is that it does not provide the right kind of education.

This is a dangerous statement to make before an assemblage of the foremost educators in this country, especially by one who can lay but little claim to reputation as a pedagogue, but I will qualify this statement at once by saying that, in my opinion, it is not at all the fault of the educators who, as a class, have much broader views and higher standards than they are permitted to put into practice; but rather of the conditions in which we live, of the people themselves who know not what is good for them.

The average citizen sends his children to school to secure knowledge that will help to make them breadwinners. He wants them to learn things that are practical for use in the store, the workshop and the counting house. The result is that our public schools reflect to a great extent this tendency. They endeavor to teach our children in the shortest possible time the greatest possible amount and variety of knowledge and, so far as mental training goes, I do not think any country in the world can show as good results as are obtained in our schools.

But we all know that true education should not be one-sided. Let us assume that we may divide the development of the human being into three main divisions, the physical, the mental, and the psychic. Of these three, the second is really the only one which receives systematic attention.

Physical development has hitherto been neglected and its value as a factor in education is only just beginning to be appreciated. While our population was chiefly rural, the need of physical culture did not exist to the same extent, for the country boy gets all the bodily exercise he requires; but now that the population is growing to be more urban in character, physical culture as an integral part of public education is seen to be a necessity.

But when we have developed the body and trained the mind, is there not something left at least as important as either of them, which demands the attention of the educator? Is the soul to be allowed to grow up like a weed, while its sisters, body and mind, are carefully nursed, pruned and grafted.

You may say, that part of education belongs to the home and church. As for the latter, it might do much, but, as a rule, it does not reach those who need it most and besides, its influence is apt to be spasmodic, not a constant one. It creates a sort of Sunday moral-

ity, which often has little in common with that of the weekday. I do not say this as a reflection against any church, but merely to point out the difficulties of obtaining satisfactory results by any methods which are applied at rare intervals, such as a Sunday-school lesson once a week.

But let us grant for the sake of argument that ethics can be sufficiently cultivated either by church or home, there is still another phase of soul life which rarely receives attention anywhere, except in the homes of the most cultured people, and which is really the source of all those manifestations by which man shows his divine origin, and by which he lifts himself above the dreary levels of everyday life. I mean the faculty which is sometimes called imagination, but in its higher form is true spirituality.

Man's experience since the beginning has been that the so-called realities of life are mere temporary sensations, pleasant or unpleasant, but always fleeting. They are present one moment, gone the next, and would disappear without trace were not man able to give them the wings of his imagination with which they hover around him to be ready at his call. They are the ghosts of his experiences, dressed in many-colored, mist-like garments, ever dancing around him in kaleidoscopic changes, recalling the past, foreshadowing the future; always pointing to something ahead, something beyond his present vision.

It is in company with these light winged spirits that he may find his greatest comfort and truest pleasure.

He who clownishly avoids them and prefers to grovel on the earth, satisfied with existence as a mere animal, can get but small knowledge of true life. But if he learns how to create a new world of his own by the power of his imagination, he will surely be led onward and upward to higher things, unless, indeed, his fancy is dominated by low thoughts and base emotions.

The question is, then, how and to what extent should the imagination be stimulated; which are the right spirits leading upward, which those that lead astray.

In seeking an answer to this question we meet with a curious fact. The imagination tries to conceive ideals of beauty, strength, virtue, nobility, happiness, etc. The more definitely these ideals are conceived the lower is the plane of the ideal, for the nearer the ideal approaches the real, the less ideal does it become. Just so it is with the expression of the ideal. If we grant that art is the language of the ideal, the medium through which it seeks expression, then will that art be the highest and the most elevating in its influence which expresses the ideal in terms least definite and limiting.

Thus, painting and sculpture express themselves in form and color.

They reproduce natural objects, idealized it is true, by the artist, but the mind of those who see art works of this kind is impressed chiefly by the color and form characteristics. It is only a highly cultivated nature that can follow the artist beyond this point into the realms of his ideal, and even then it will often be limited by the limitations of the artist, the subject and the material of expression.

A step higher stands the poet. He uses words to express his ideal and words have a limited meaning; but so skillfully does he combine them, so musically do they rhyme and chime, that the mind soars beyond their original meaning and gladly leaves reality to dream in the cloudland of fancy and imagination.

But what are all these arts as compared with music? It does not speak through the medium of material objects, it does not require words. It is, itself, the soul's language. Its meaning is infinite, unlimited. It is, itself, beautiful and it leads the soul to beauty. It is truthful and it leads to truth. It, too, has form and color, but they are its own, not borrowed from aught else in nature. It, too, has rhythm and rhyme, but not that of the mere spoken word, but that expressed by a sound of beauty, the musical tone.

Music is the art which not only forms the best language for the expression of the ideal, but also that which most readily turns the mind to seek for higher ideals. Just because it does not describe them in so many words or give them such and such form, does it lend itself most appropriately as the best art medium for all people, rich and poor, educated and uneducated, for of what poor stuff would be most of the ideals which men could describe or name, limited as they would be by the narrowness of each individual mind. Music lifts men unconsciously to planes of thought and emotion far above those of which they are ordinarily capable.

Good music, somehow, seems to bring out the best that is in man. It makes him feel, better than anything else can, that he is something more than a vitalized lump of clay, for in music his higher spiritual entity seeks and finds communion with that of his fellow beings and with its original source.

In order, however, that good music may act most directly upon the mind, it is necessary that its nature become familiar through use and practice. The person who hears a beautiful musical composition may enjoy it and be impressed by it, even if he knows nothing of the art; but he who is able to sing or play some instrument can enter much deeper into its beauties and will carry away a more lasting impression.

It is, of course, impossible and undesirable that every one should learn to play piano or violin or other instrument, for all these require

special aptitude and talent. But it is possible and most desirable that everyone should learn to use his voice and to train his ear. All people can learn to sing. All people should learn to sing. Teach the little child and the grown-up man can sing—the woman as a matter of course. Once bring music into every home and you have given it an angel of beauty that will brighten the lives of all that dwell therein. When music becomes an habitual occupation of the leisure hour it has a strong influence upon the character. Not that I believe a thief or other kind of rascal can be converted into an honest man by listening to Beethoven's C minor Symphony, but I do believe that if such a man had been brought up under the influence of good music he would have grown up a better man in every way.

The great mistake that has been made in the past is that we have looked upon music merely as a pastime, an accomplishment. As such it is only an ear tickler, a sensual pleasure, going in at one ear, out at the other, without any influence upon mind or character.

Were this all we could expect of music, it would have no place whatever in popular education. But good music can be and should be the greatest spiritual influence upon human character. It elevates, it ameliorates, it softens, it inspires, it encourages, it comforts, it speaks with the tongue of angels and tells of heavenly things. Good music is never degenerating, it never suggests low and vulgar thoughts, but it is continually lifting men away from the low and worldly to purer and nobler thoughts and aims.

Can we afford to neglect such an influence in the education of our children? Should we not rather welcome this graceful muse and bid her stay in company with Minerva, Mars, and Mercury, so that their united arts may help to produce the perfect man?

Music should have a place in every school for rich and poor alike; not in the old-fashioned way, by teaching the children to shout songs by rote; but by teaching them to sing from notes in order that in after life the treasures of music may be available to them just as, by learning to read books, the treasures of literature have been made their own.

Let music take its place side by side with spelling, reading and arithmetic. The regular class teacher can do as good work with the rudiments of musical instruction as she can with other subjects, if she is made familiar with the simple pedagogical principles which underlie the best methods of sight singing.

The science of sight singing has made vast progress within the last fifteen years, and we are indebted for it not to the musician, but to the pedagogue, the teacher of reading and arithmetic, in other words, the student of the child's mind, for that is what a true teacher must

be. As a musician, I offer my sincere homage to the educator for showing us the path by which music which in its higher forms has been the exclusive property of the talented or the rich, can be popularized and brought into the daily life of the people. As a teacher I rejoice and take pride and courage in the fellowship of those who are devoting their best efforts to the development of a better and higher manhood and womanhood, thus contributing more to the lasting glory and prosperity of their beloved country than can ever be achieved by the greatest warrior or statesman.

To introduce music properly into the public schools, very little preparation is necessary and comparatively little additional expense need be incurred.

With one supervisor of music who is a competent teacher and musician, to every ten large schools to instruct the regular class teachers and, by weekly visits to each class-room, to supervise their work, the best results may be obtained. Such an arrangement insures uniformity of method—a very important requisite to success—and causes the least loss of time and effort. Ten minutes a day or, in the higher grades, fifty minutes a week in any division convenient to the teacher, will, in the usual school period from the age of six to fourteen, produce such results as to surprise even the most sanguine.

In high schools and colleges the study of music should by no means cease. The rudimentary steps having been accomplished and the drudgery (or what would be drudgery if begun in later years, but is none to the young child) left behind, the young men and women should receive instruction in the elements of harmony and musical form. They should learn to analyze a musical composition, to find its themes, understand their development, variation, the wonderful interweaving with each other, and thus to enter into its deeper meaning and to learn to see the greater beauties which lie hidden to the ear of the uninitiated. All this requires no special gifts, but may be grasped by any one of ordinary intelligence. This has been amply demonstrated not only in many schools in which proper methods have been applied, but by my own experience with the people's singing classes of New York, in which my assistants and myself have taught thousands of working men and women, many of them with but little education of any kind, to sing at sight four, six, and eight part choruses, cantatas and oratorios, and to recognize and name their principal harmonies, without having required any applicant for membership to submit to any test whatsoever, either as to voice, musical knowledge or talent.

Provided with the power to read music, the merchant, the lawyer, the mechanic, yes, the day laborer would be able to get out of a

Beethoven symphony, an oratorio by Bach or Handel, a mass by Palestrina, or an opera by Mozart or Wagner, a meaning, deeper, truer and more beautiful than could be obtained by one who listens only with the outer ear.

He will be inspired by communion with these great masters to make himself worthy of intercourse with them. He will learn that there is a higher self living within him which, be his lot on earth ever so hard and full of trouble, will be able to dwell in realms of serenity and peace.

His thoughts will become purer and higher, his aims nobler and loftier, his deeds worthier and better, and, thus, good music will have made of him a good citizen.

DISCUSSION.

MISS SARA L. DUNNING, New York City.—For many years I have been of the opinion that if Mr. Damrosch "says it's so, it's so if it is n't so," and when I read the exhaustive and convincing paper to which we have just listened, I did not alter my opinion.

Almost any company I am sure would agree with him. Certainly a company of people especially interested in the line of work represented here will cordially assent when I say that logically and forcefully he has proven that "good music does make good citizens," so I do not know that there is anything for us to discuss.

Consideration of the paper has, however, brought to my mind two questions upon which I would like to have the opinion of the Music Department of the National Educational Association.

(1) Is poor music to be tolerated under any circumstances? (2) Is bad teaching of good music an aid to good citizenship?

This week, this very day and hour, as so many thousands of us are assembled in convention in this beautiful city of homes, another convention much larger is assembled at our national capital from the homes of the East and the West, the North and the South. There' rich and poor come together on a perfectly even footing; the son and daughter of the capitalist, who have had the refining, educating influences of the best in art and most beautiful in nature, both in the Old World and in the New, sit side by side with the son and daughter of the prairie farmer or the mountain miner, who are now, perhaps, for the first time in their lives away from their quiet homes. One of the great features of this grand Christian Endeavor movement is the singing. I believe with all my heart in the religion as exemplified in the life of our Lord Jesus Christ, and far be it from me to decry the good that may be accomplished through "Gospel Songs" and the senseless jingles in most Sunday school singing books.

The chief aim of all education is character-building, and if this has been at all aided by these songs let us be thankful.

But I suspect in most cases the uplifting has been in spite of, rather than because of, such atrocious words and music as characterize many, if not most, of these songs.

Then there are the so-called "popular songs" of the day. One of them will rise like a mushroom in a night. It is sung in theaters, ground out by hand organs, whistled by bootblacks; but can we say the drawing rooms never echo it?

Everybody knows it is trash—trashy words and trashy music; yet thousands are singing the song popular for the moment and seemingly getting much pleasure from it. Are they better or worse for these songs?

Many people of mind and heart and conscience, too, tolerate and perpetuate the religious songs almost equally faulty as to music and poetry. Are they better or worse for these songs?

We pass on to the consideration of our second question, viz.: Is bad teaching of good music an aid to good citizenship?

I have in mind two school commencements held within a few days, and within a number of miles from New York City that could be expressed by one figure. One is a large private institution which has a wide reputation for most excellent work in most branches of education.

The music has been for several years in charge of one of the finest organists of New York, a thorough master of his instrument and of the theory of music, but having not the faintest shadow of knowledge of methods of imparting this to others. Three selections were rendered by a chorus of one hundred and twenty voices that had been in training one hour per week since last January, with two or three hours extra per week of late. Each of the four parts had been hammered into the heads of the number to which it had been assigned, while some of the others frantically caught up their histories, studied their Latin verbs or pinned the dress of the one before them to the round of the chair. However, after nearly six months practice on these three pieces they were so well rendered that an educator (?)—if you could see my notes you might observe an interrogation point after that word—said "I do n't care how they learned it; when they can sing like that I am satisfied."

The work of this man was better than no work in music, perhaps, for the final results were good; but is it not pitiful that these results should be reached at such a cost? He runs an imminent risk of crushing out all respect for the study of music from the minds of the pupils at that critical age.

The music of the other commencement I had the pleasure of hearing personally, and was told by the conductor in charge that one of the selections that had been so delightfully rendered had never been seen by the pupils until the week before, and they had had but two rehearsals of it. He added, "I am going to give a selection at another of my schools three days from now and they have never yet seen the music. It will not be sent them until tomorrow."

In this second case the pupils have not only learned the numbers given, but they have gained the ability to help themselves from the stores of all past musical literature as well as to that of the future as it shall be opened to them. Who can estimate the value of such work as this on the mind and heart and lives of the rising generation?

People like to do what they can do well, and as these young people go out into life they are not going to stop singing, but are going to inspire others who perhaps have not had their advantages to join them in song, and thus all rise together to a higher and nobler manhood and womanhood.

*OUR EXPERIENCE IN INTRODUCING MUSIC AS A
STUDY IN OUR PUBLIC SCHOOLS.*

BY JOSEPH MISCHKA, SUPERVISOR OF MUSIC, BUFFALO, N. Y.

In extending his invitation to prepare a paper to be read before this assemblage I felt that the chairman of the Music Committee did not expect me to say anything in the way of enlightenment or advice, knowing as he did that I am one of the most recent accessions to the ranks of school music educators, and that I could not as yet have brought about any methods or results which I could offer as a pattern or a guide. I have therefore chosen to give you "Our experience in introducing music as a study in our public schools," relating it without comment, and without a claim that our mode of procedure should serve as a model, hoping that the discussion will bring out the points to be approved or condemned. I will begin by describing the condition in which music as a study in the schools existed prior to 1894. For nearly forty years one, two, and more recently three, special music teachers were employed to visit the schools as often as time permitted, usually twice a month, and give a lesson in music. In the earlier years our schoolhouses were built to include one or more assembly rooms in which several grades could assemble. Most of these assembly rooms contained a piano. After gathering as large a portion of the school as possible, the teacher would write the melody of some pretty song on the blackboard. After a desultory comment on time, key, and intervals, the teacher would play the song on the piano, and then ask the children to sing. If the song pleased the children they would exert their natural abilities to learn it virtually by rote. If they did not like it they would exasperate the teacher by their impassiveness or their misbehavior, and sadly strain the pleasant relationship which should exist between teacher and pupils.

The regular teacher unless she chose to be, was in no wise concerned about the music lesson, as she felt that it was not incumbent upon her to drill her class in the subject, and so nothing was done in music until at the next visit by the special teacher.

The consequence was that the teacher gained no knowledge conducive to self-reliance in the solving of musical problems.

To the credit of Mr. Everett L. Baker, my predecessor, be it said that in spite of the absence of collaboration on the part of the regular teachers, he and his assistants produced results satisfactory enough to keep him in position and the system in existence until the infirmities of age incapacitated him from further activity.

Time and circumstances favorable to a change having arrived, Mr. Emerson, the present superintendent of education, cast about for a man and a system equal to the demands of the hour.

For a man he desired one with an established musical reputation, and possessing the confidence of the community. He must also be in line with the latest developments in musical thought, especially as it appertained to teaching music in the schools. That he chose me instead of one of the many more capable men so abundant in this state and country is due to the fact that he was willing to strain a point if he could make the appointment from among his fellow citizens.

In taking an inventory of my qualifications for the position, I found that in spite of the fact that for many years I had served in the capacity of organist and director of choirs, chorus, vested and quartet, director of singing societies, male, female, and mixed, teacher of singing in the normal school and teacher of piano and organ, I did not possess the kind of experience that would enable me to put into operation the only system by which the teaching of music in the public schools could be made productive of satisfactory results.

This system, as I was made to understand it, is to instruct the pupils in sight singing to the extent that they know the intervals at sight, to sound them when they see them, and to sing them in the rhythms indicated. Incidentally, the voice is to receive attention in the formation of good tone, if not to the extent of cultivation, at least to conservation of the child voice during that child's school life.

The experience I lacked was how to accomplish this through the medium of the regular teachers, most of whom had no knowledge of music whatever, and to do it without the aid of any musical instrument save the pitch pipe.

In other words, the subject of music must be established as a subject as regular as any other in the school curriculum, and the regular teacher must hear recitations in this as regularly as in the others.

In casting about for aid it seemed to me as if the proper material and the best manner of presenting it was contained in what is known as the normal music course, and on being informed that a summer school existed where all the special problems of the method contained in this course are expounded by some of the ablest and most successful school music teachers in the country, I availed myself of the advantages offered by this school by attending its sessions until I was considered fit to be graduated.

Here I learned that the essential difference between teaching the perception of the pitch of tones with and without the aid of an instrument is this: With the aid of an instrument the operation is largely

physical, while without it is purely mental. On an instrument the pitch of tone is obtained by touching with the finger something that is perceptible through a bodily or material organization, cognizable to the senses, external.

The tone thus produced may be reproduced by the voice by imitation without entailing any mental process upon the singer. It is for this reason that, having always relied upon instrumental assistance, so many singers are helpless without.

With the voice and without the aid of an instrument the pitch of a tone is produced by a mental process involving a definite knowledge of the relation of that tone to what is called the keynote of a certain series of tones momentarily employed, and its relation to every individual tone of that series. This definite knowledge is obtained through a mastery of all the problems of tune. All problems of tune are solved by means of what is known as the major scale and its relative minor. The major scale is taught by imitation, a task easily accomplished, as the succession of tones forming it seem to be a very part of most children's natures. This scale as a whole having been made a mental object is first represented to the eye by the picture of a ladder, the steps of which are named 1, 2, 3, 4, 5, 6, 7, 8, to show the scale relation; c, d, e, f, g, a, b, c, as fixed pitches, and do, re, mi, fa, sol, la, si, do, for euphonious vocalization, with the aid of which nomenclature are taught all the relations of every step to every other step. The next representation to the eye is by means of the familiar staff notation, by means of which the pitch of a sound is shown by the position of a note upon the staff, the length of a sound by the shape of the note and the strength of a sound by the position of the note in the measure. The duration of sounds is taught by means of time names given to regularly recurring pulses, these pulses being represented to the eye by means of a metronome. To a group of two pulses are given the names, Tā, tā; of three pulses, tā, tā, tē; of four pulses, tā, tā, tō, tē; of six pulses, tā, tā, te, tō, tā, te. Only four time names are used, ta and to, always associated with emphatic, tā and te with unemphatic pulses. By means of an ingenious elision or addition of consonants provision is made for measuring sounds of more than one pulse or of any part of one pulse. Thus are solved all problems of time.

While obtaining mastery over these problems of tune and time, the problem of expression is being solved by attention to the emphasis, and the sentiments represented by the words that are being sung. Incidentally attention is also given to the right use of the voice, in order that the tone produced may be as agreeable as possible, the pro-

cess employed at all stages being first, to do a thing, then name it, and then make a representation of it.

Right here let me say that recognizing the representation of the things in music is more difficult than doing the things themselves. This is borne out by the fact that children in the first grade easily learn songs by note that youths and maidens in the ninth grade would find very difficult to sing by note. It now remains for me to describe how this method of teaching music in our schools was put into operation, and what are its results after two years of experiment.

The first installment of material consisted of a series of charts in sufficient quantity to supply each floor in each school with one or two copies according to the number of grade-rooms on the floor, the teachers being asked to arrange the music lessons at consecutive parts of the day, and pass the chart from room to room. With each chart was supplied a manual containing general information about music and special information about the special problem of tune and time, as shown on each leaf of the chart. Each teacher was supplied with a pitch pipe, and a pocket metronome. At a series of monthly grade meetings the supervisor of music exemplified to the teachers of the respective grades the problems to be taught during that month, the regular teachers being pupils for the nonce. In addition to this instruction the supervisor, or one of his two assistants, arranged to visit every grade-room in every school once in four weeks, in order to observe the regular teacher's work, or give a model lesson if desirable. The entire nine grades were started at the same place, namely, at the very beginning, with the expectation that with their advanced general knowledge the higher grades would make more rapid progress and would the sooner arrive at the place in the method commensurate with their intelligence. While on the whole this expectation was realized, there were numerous exceptions resulting from varying conditions. Favored by natural and acquired ability, some teachers advanced the lower grades beyond the point attained by some teachers in the higher. On an average the primary grades had mastered all the exercises and songs in the keys in sharps, and the upper of all the keys at the end of the same year.

At this point I take great pleasure in mentioning the very great interest the great majority of the upwards to one thousand teachers took in this new way of teaching what was to many a new subject or a new method, and in expressing every acknowledgment of their good work faithfully performed.

With the beginning of the second year came a second installment of material namely, copies of the second series of charts for the upper grades, and copies of the First Reader for the fourth, fifth, sixth and

seventh, and copies of the Second Reader for the eighth and ninth grades. Also copies of a collection of rote songs entitled "Child Life in Song," for the first, second and third grades.

The series of monthly grade meetings for teachers were again utilized by the supervisor to exemplify all the new problems and his visits to the grade-rooms continued.

At the end of the second year nearly all the grades had acquired the ability to read fairly well in from two to ten keys and get started in two-part singing.

The interest on the part of teachers and pupils seems unabated. Our progress though slow, is sure. The fruition of the new method, and our faithful efforts in teaching it will not be fully apparent until the work has become as thoroughly graded as it is possible to be, and the regular teachers have become proficient in its technique. Naturally there are several obstacles to the rapid realization of the possibilities connected with the teaching of music in the public schools. The greatest is the large number of regular teachers who have never had any preparation for teaching the subject, or are even conversant with the subject matter, to say nothing of those to whom nature denied the special gifts of voice, apprehension of pitch and feeling of rhythms. Of the latter there is a surprisingly small percentage. In most instances they have recourse to the expedient of exchanging subjects with other teachers, naturally favored in music. The former are acquiring proficiency and information as rapidly as may reasonably be expected, but it will be some years before they are thoroughly capable. At present the city examination of teachers does not include music, but when the subject is included in the requirements of a well-equipped teacher a great impetus will be given to the progress of teaching it.

A lesser obstacle is the usual percentage of children to whom music must remain a sealed book. Naturally devoid of those qualities enabling their possessors to apprehend the things in music and to do them, these children are not only a hindrance to themselves, but to the teacher and the class. In her capricious dispensation of gifts, nature frequently endows the least musically qualified with the greatest willingness to learn. The complications caused by this state of affairs we have not yet been able to satisfactorily clear up. It is hoped today's discussion will come to our rescue.

Another obstacle, but one which does not give us serious concern, is the difficulty experienced in interesting the young people of the higher grades. I say we are not seriously concerned, because time will remove this difficulty. It exists now because the present state of

instruction does not include suitable music for these young people, nor have they the ability to sing it were it given them at this time.

When the pupils of the first grade of 1894 are in the ninth grade of 1903, having passed through all the stages of musical instruction incident to the nine years of school life, they will have the ability to sing and have acquired the taste for the kind of music for which they will entertain a sustained interest.

It may be worthy of mention that the results achieved by the teachers are not always in conformity with what might naturally be expected. In many instances the teacher who does not herself sing, but who faithfully carries out the instructions of the special teacher, manages to make her class sing surprisingly well; while the teacher who is more or less a musician, but treats with a lofty disdain the mode of procedure prescribed, has only her trouble for her pains.

In closing, I take pleasure in saying that the bright voices and latent musical ability of the children, and the good disposition of the regular teachers, warrant the prediction that at a not very distant time the results from the study of music in the schools of this city will compare favorably with those of any city in the union.

DISCUSSION.

P. M. BACH, Colorado Springs, Colo.—The success obtained by Mr. Mischka during his brief experience in the public schools of Buffalo, is certainly very creditable, showing that he combines the proper zeal with true musical art. The laudable support given him by Superintendent Emerson is also noteworthy.

A most desirable feature referred to is the institute work with the regular class teachers, without which there can be no success. The teachers must be instructed systematically and incessantly how to guide the children in the various departments in learning to sing and read intelligently. In order to insure the greatest success and the best results, it is quite necessary for the supervisor of music to meet the teachers oftener than once a month for instruction and direction. With the proper effort and enthusiasm on the part of the supervisor this can be done without over-taxing the faithful class teachers. It is a wrong principle to compel the teachers to meet in a body on Saturdays. In larger cities the teachers of each department should meet in sections, at specified places, after school, sufficient time being given them from their school hours to enable them to meet promptly. While such an arrangement demands the supervisor's time and energies an additional hour after school every day, all the teachers of the various departments could thus be met in sections once in three weeks.

Regarding the obstacle that a large number of the regular class teachers have not had any preparation for teaching the subject, I would say this matter rests with the authorities and the supervisor of music. In the first place, no one has a moral right to attempt to teach in the youngest classes unless she feels that she can teach rote songs and musical memory gems, as well as literary memory gems.

This, however, means work for the supervisor of music. From this point forth any good teacher, whether a singer or not, can teach sight-singing successfully—it she wills it—since in this work the singing is to be done exclusively by the children, who take the pitch from the pipe or fork, and follow the teacher's pointer as it moves up and down the scales on the chart or blackboard from note to note—from skip to skip—meter being a subsequent consideration in connection with notation. Meter, however, is by no means disregarded, as it forms a factor in the memory gems taught by rote, side by side this staff practice.

In reference to the second obstacle, that there is always a percentage of children to whom music must ever remain a sealed book, because they are naturally devoid of any musical ability, I must say that the old idea, that time and tune belong to a favored few of mankind, is fast dying out, and that tone deafness is indeed a *rara avis* in schools where music is properly taught. The great Beethoven, in his self-conscious effort to keep time to the music in learning to dance, was pronounced utterly devoid of a sense of rhythm by his tactless dancing master.

Tune the children's ear with proper rote and play songs! Give them musical memory gems—without notes—and soon an adequate foundation will be laid for more intellectual work. It was upon this foundation in the schools of Buffalo, laid by the beautiful mind of Mr. Baker, which made it possible for Mr. Mischka to erect his technical superstructure.

It may be of interest to learn that I have ascertained by a rigid test in the fifth, sixth, and seventh grades of our city schools, that 96.5 per cent of the public sing in tune, the remaining few being unable to use their voices properly, either through some physical defect, or tone deafness. In the second, third and fourth grades, I found 97 per cent of the pupils in tune, alternating in two-part exercises and songs from notes, at sight, and writing simple melodies from dictation, the remaining few being tuneless, owing to physical defects, or lack of experience by reason of transientness. They all give attention to the work, however, and seem anxious to profit by it, in the hope that they may some day overcome this difficulty.

When children enter the first grade, at the beginning of the year, their sense of hearing and tone perception seems almost a blank, and it is interesting to note how in some of the classes this passive condition is overcome in the comparatively short time, while in others the young beginners hold out stubbornly for several months with their unmusical "growls," to the disheartenment of the teacher, who invariably persists in bringing their voices up. In my recent tests, I found the first grade almost uniformly in tune, there being but a few tuneless voices or monotones, which their teachers, who are good singers, are determined to bring up soon.

MUSIC IN EDUCATION.

BY MRS. EMMA A. THOMAS, DETROIT, MICH.

Music in education, or music as a helper thereto, is our theme. What a happy combination; harmony and culture, sweet sounds and sense! Music to soothe and stimulate, that reason may perceive, understand and know. In these sounds you have the keynote, the baton that guides us in our work. Music as we know it, is a modern art, the product and promoter of the highest civilization, its effects being humanizing as well as harmonizing.

It appeals to and cultivates the emotions, broadens the purest and best of the affections, desires and impulses, and brings the mind to contemplate and seek for the ideal in thought, feeling and practice.

The influence that music has over certain children who stand in need of refining influence is very marked. I have one of my schools situated in one of the neglected localities of the city; the principal has told me of, and I have seen, the wonderful refining effect of music.

For a number of years, when Gilmore's band would visit Detroit, I would have a chorus of about one thousand voices sing with the band. The principal of the school mentioned above, said she noticed the first year the boys began to take pride in dressing better and were so much more gentlemanly. This same school had a picnic about two weeks ago, and the teacher, as soon as it was decided where they would go, asked: "Well, what shall we take with us," thinking of course they would say "Our lunch;" but one of the A room boys raised his hand and said: "Can 't we take our music readers?"

In another school there is a boy who very often has an outbreak of temper that it used to take the teacher from ten to fifteen minutes to subdue. She discovered that by singing one song, taking perhaps two minutes, he was all over his ugly fit, and now they come less and less often. The principal of one of the largest and best schools told me the effort of disciplining in her school was lessened 50 per cent since music was introduced. The reason that it has this effect in the management of a school is that it brings the whole being of the child into a harmonious relation with his surroundings. The very fact that the whole school has to unite in a rhythmical movement tends to cultivate self-control.

The quality of the music of a nation is a test of its intellectual force. Education in music cannot fail to sharpen the wit and heighten the perception of our pupils.

I have never found a room that was good in music in which the teachers did not tell me that the pupils were good in arithmetic.

The ability to read music correctly and rapidly is one of the best and strongest tests of good eyesight and concentration of thought, and in every department of life persons with exceptional abilities in these particulars are leaders in their several pursuits.

If the voice is properly trained, the enunciation is improved and in a thousand ways, because of clearness and quickness that will contribute to success. Music educates the ear, and an ear that is quick in catching tunes will be quick in catching words also, and the readiness in this regard is often all-important in the transaction of business.

The selection of songs has much to do with music in education. In my lower grades I have introduced a number of lullabies, and the teachers are much pleased with their effect on the children. If the pupils are restless, singing one of the sweet little lullabies soothes them and they are ready to settle down quietly to work. Again, if they are dull select bright songs, above all songs that will appeal to their childish imaginations. So many choice bits of poetry are and can be set to music. A number of my rooms had an Eugene Field day, and I found several that had already been set to music and it was not a difficult matter to set three or four of his poems to music. At the time of his death my primary grades sang one of his lullabies. Children can remember poems that are set to music so much easier. The songs that I learned when a little child have never been effaced from my mind, and many a good lesson I learned from them. Songs appropriate to the seasons should be taught and can be a great help to other studies, science, etc. Again, it is very necessary to teach patriotic songs. In no other country on the face of the globe is it so necessary that the national music should be engrafted in the very lives and beings of the people, and in no other country is national music so neglected. The American people is a heterogeneous one. We have Germans, Dutch, French, Hungarians, Swedes, Poles, Chinese, Japanese, Bohemians, Russians, and citizens from every clime and country.

Other nations nurture their national music in order to preserve the patriotism which their people already possess. We must do more than this, we must instill into these aliens the essence of our free institutions, teach them what they never knew, and open their understandings to what they can hardly comprehend. I am exceedingly pleased to see that the leading directors of music are insisting that the pupils of the school become familiar with the patriotic songs.

Among the many advantages to be derived from the study of vocal music, we find it of great value as a direct promoter of health. Cor-

rect breathing is the foundation of good singing. The deep, full, vigorous breathing required in singing enlarges the chest, develops the lungs, quickens the circulation, and calls into constant exercise many of the organs directly related to the maintenance of health. It is said that in Germany, where the study of vocal music is universal, consumption and hemorrhage of the lungs are almost unknown, and it is believed by celebrated physicians to be due to the strength which their lungs acquire by constant exercise in vocal music. While in this country, where the study of vocal music is not universal, statistics show that one out of every eight persons dies from consumption alone. In schools where music is taught we find attention is paid to correct position and pure air.

Music in education develops individual talent. I have several teachers that have become proficient in writing both words and music. I also had in my school a boy thirteen years of age who could write for me appropriate verses for any particular occasion. The Washington Birthday and Memorial Day verses written by him were worthy to be sung by anyone. The only time that he ever hesitated was when the teacher asked him to write verses for St. Valentine's Day, when he said: "Well, Miss Winter, I'll try, but I ain't much on love."

I am often asked, can regular teachers take the work when the supervisor is not present? When we first began to teach music in the schools, eighty of the three hundred teachers could sing a little by note. Some very well and others very little. At the outset, with one or two exceptions, we worked as special teachers; that is, we gave all the new lessons, the grade teachers listening and observing. They would then do the best they could with the work until the next month, when we would hear the previous lesson and give the new one.

It was some time before the grade teachers felt confidence enough to give the lessons under inspection, but as they gained confidence they were willing to try, and today with nearly 800 teachers we have very few who are not ready to give the music lessons themselves. The teachers are wonderfully kind and helpful in the work, in many instances doing more than I ask them to do. In the main the grade teachers are now giving the instruction to pupils, thus making my work supervisory. When I have one that has no ear for music, I send one of my training class or find some teacher in the building who can change work.

In considering the cost of music teaching, I will take my own city, Detroit. One should hardly include the cost of books used, as they also furnish a graded set of good readers and should be properly charged to the account of reading. Parents have told me they found their children recognizing and using words beyond their grade, and

after investigation they found they had acquired these words from their songs and exercises.

We include the cost of instruction only, on the wages paid to those who devote their time exclusively to vocal music. The teaching of vocal music in Detroit has so far advanced that it is now done principally by the regular grade teacher; so the direct cost in Detroit is the amount paid for supervision only. The cost next year will be less than $4\frac{1}{2}$ cents per pupil for the whole year's instruction in vocal music. In other words, a child can enter the Detroit schools and take an eight years course in vocal music, including the work of the primary and grammar grade, for the insignificant sum of thirty-five cents. A pupil who has taken this eight years' course has acquired the principles of musical science, and when he wishes to further perfect himself in instrumental music he has but to acquire the technique of the instrument and the parent is saved a large amount which he would otherwise be compelled to pay for private instruction. Professor Hahn, of the Detroit Conservatory of Music, will give a pupil credit for a year's work if he has had music in the schools.

The effect of music in the home life of the children can hardly be overestimated. We find that where literature is made an important part of the work, and the children are allowed to carry the books to their homes, the parents of these same children eagerly avail themselves of the opportunity to become acquainted with authors whom they otherwise would never know. The same is true of music. All of the elevating influence which music exerts in the school-room is reflected in the home. Time that formerly was devoted to idling or objectionable amusements, is now spent in song. Almost imperceptibly the home atmosphere is purified.

The influence of vocal music as a moral force has been universally acknowledged, and how it secures this result may well be worthy of our consideration. Direct instruction will not prove very successful in instilling into the minds of children those moral and religious truths which will shape their lives and control their future actions. But when a child learns some truth expressed in the words of a favorite song, its influence goes with him at all times. The boy forgets the oath or impure jest when through his mind comes stealing some sweet melody he has learned in the school-room. Dr. Brooks has wisely said, "A school song in the heart of a child will do as much for its character as a fact in its memory, or a principle in its intellect." Because the impressions of early childhood are the most lasting, does vocal music become one of the greatest agencies in the formation and molding of character. We cannot begin to estimate the influence on the future life of the children exerted by the songs learned in the

school-room of today. To develop the intellect is not sufficient; we must go deeper than that if we would do the greatest good to the child and show him there is a higher development, the development of the soul life. Only as we recognize the inefficiency of "direct teaching" to secure this higher development, do we value and appreciate the influence of vocal music in securing the desired results. Good music exerts a wonderful power for good over the heart, and a little song may influence the destinies of a world. It is said a song heard in the street so touched a good woman's heart that she made a home for the boy singer in her house, and saved to the world — Luther.

Music is the universal chord to which the hearts of all men vibrate. Well has a writer declared: "Songs containing moral precepts and lessons, and songs of the affections generally will surely develop like sentiments in the children who sing them. In no way can a code of morals be taught, or the sensibilities and emotions be so trained and developed into their better and higher uses, as through the instrumentality of song."

Recognizing this, the time may soon come when music will be considered the most important subject taught in our schools. The best means of culture is singing. "Music is at home a friend, abroad an introduction, in solitude a solace, in society an ornament." And we heartily agree with the following beautiful quotation:

"Music is God's best gift to man, the only art of heaven given to earth, and the only art of earth that we can take to heaven."

THINKING SOUNDS DIRECTLY OR INDIRECTLY.

BY PROFESSOR SAMUEL W. COLE, BOSTON, MASS.

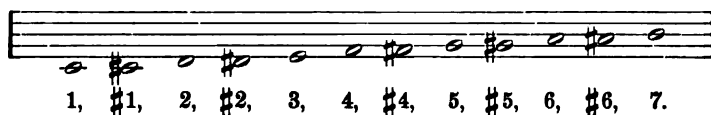
As my subject will compel me for the sake of what I believe to be the truth, to strongly inveigh against what I understand to be the theory and practice of the very large majority of the supervisors of public school music in this country, I beg you to lay aside for the time being, all previous opinions and to hear me patiently as I attempt to explain the theory and relate what I have been able to accomplish by means of it in practical work with children of all classes, and with adult pupils in the ear training classes at the New England Conservatory of Music. I wish you to weigh carefully the arguments I may put forth in support of what I believe to be the only successful, reasonable principles of teaching vocal music reading—of thinking sounds—in all the world. Not my method, mind you, nor my principles merely, but those upon which the most successful work is done

the world over. So far as the limit of time will permit, I propose to speak positively as well as negatively, to tell what to do as well as what not to do, and to give a reasonable reason for it all.

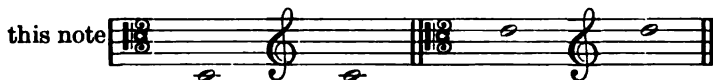
I must assert at the outset my convictions that this question of thinking sounds intelligently lies at the very foundation of our whole musical structure. We hear it contemptuously called "note reading" in Massachusetts by those who are educators in other branches who would substitute for such work much rote singing. Let me assert that I never yet taught note reading, as they say, for the sake of note reading, but that I might thereby unlock the treasure house of music; that I might put into the hands of the boys and girls the key by which they themselves can gain access to this wonderful treasure house and revel therein not only while in school, but throughout their whole lives. To do what these educators propose, would be like teaching the children a few of the gems of literature, and sending them out into the world without the ability to read these countless treasures for themselves. I admit that many of the so-called musical exercises which we teach belie the name, for they are utterly destitute of the soul of music; they represent only one stage in the evolution of that form of public school music which we all sigh for, long for, work for, and which the next generation will realize. Nevertheless, I prefer to have my boy taught to think sounds and to read music intelligently by this devious road, than that his musical intelligence shall be dulled by the continuous appeal to his imitative faculties until he either loses the power or becomes too lazy mentally to think sounds. Happily this is not the only alternative, for I believe it a much easier task with all that has been learned during the past ten years, to make the children of the primary school, through their own intelligence, acquainted with the melodic gems of the great musical geniuses of the past, than to teach the same classes to read the gems of Longfellow, Lowell, and Whittier. So much for the great importance of learning how to think sounds.

I have met with three kinds of vocal music readers; those who could read well with an instrumental accompaniment, those who could read well without such accompaniment, and those who could sing any sound they saw represented on the staff. We can hope to produce many of those who read well with an instrumental accompaniment by an intelligent course of instruction in the public schools; of those who read well independently of an instrument we shall make a goodly number, and "may their tribe increase;" but of those who can sing any sound they see we may not hope to make any, for they are the work of God; they are music readers by instinct. The first two classes are those who learn to think sounds and read music as they learn to read,

write, draw, cipher, and indeed, almost everything, by second nature, and their number and efficiency may be greatly increased if we can ever rid ourselves of the clumsy method by which we compel them to think sounds around so many corners. Let us analyze this subject and see if the method so much in vogue in this country is or is not cumbersome and indirect. All the sounds of music according to the tempered-scale standard which is current in all civilized nations may be reduced to the following list of intervals; perfect primes, major and minor seconds, major and minor thirds, perfect and augmented fourths, perfect and diminished fifths, major and minor sixths, major and minor sevenths; thirteen in number or, if you esteem thirteen an unlucky number, we will add the perfect octave and make it fourteen; or to drop the language of intervals and speak of the single sounds thus:



we obtain but twelve different sounds, which, according to our tempered scale have always the same relation to each other. You notice that I have omitted the clef because I wish to be understood as speaking of relative pitch. Our abominable method of using only the G and F clefs has given to the staff a different meaning from that which it has in the older and more musical nations of Europe. To a well-trained musician



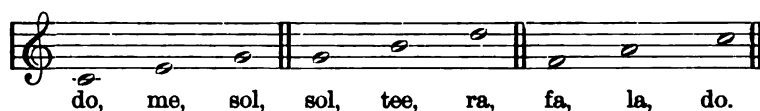
is as often D as C, and this note is as often C as D. All these sounds and intervals have various synonyms, it is true, for instance $\sharp 1$ and $\flat 2$ are the same in sound though different in representation; in the language of intervals $5-\sharp 5$ is an augmented prime, while $5-\flat 6$ is a minor second.

To make the matter still more plain a major scale may be written



and all that is necessary to get the little children to sing either, after the scale has been taught in some position, is to give the proper sound for the starting notes. The major scale, or any part of it, or any

melody may be written in many different positions but the ear recognizes each as the same old tune no matter what the key is in which it is sung. It is sung, too, in one place as well as another, after the key note is given if it be still within the compass of the voice. The eye would also recognize it as quickly as the ear if we were taught to think sounds rather than names. This is the charge which I bring against the "movable do" system or any other system which compels the learner to call a set of changing names when in the act of singing. Take the major triads of the key of C major as an illustration.

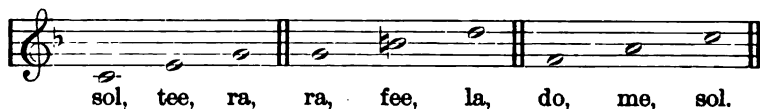


All these have the same relative effect on both the eye and the ear and, given the fundamental tone, one is as easy to sing as the other, but by the movable do system you compel the pupils to say nine names where three at most would answer all purposes. Again, suppose these same sounds occur in another major key to which most of them are common; take the dominant G or the sub-dominant F.



thus we have fa, la, do, for what was just now do, me, sol; and do, me, sol for what was just now sol, tee, ra; or sol, tee, ra for what was just now do, me, sol in the key of C and fa, la, do, in the key G, etc. All these changing names for the simple sounds of the major triad.

I know very well the law-of-association argument which is usually brought in at this point to support this practice, but the admission of this law is to admit an indirect mental process, that through the names do, me, sol, sol tee, ra, etc., we remember the sounds of the major triad; what can this be except thinking sounds indirectly? Let us pursue this investigation a little further. Suppose these same sounds occur in the key of F major with the raised fourth indicating the modulation to the dominant, amounting to a mere cadence and nothing more.



Here you have the old names quite differently applied and one new name. Here you have sol, tee, ra, for what was do, me, sol in the key of C, and fa, la, do in the key of G. Then ra, fee, la for what

was sol, tee, ra in the key of C, and do, me, sol in the key of G, etc. This is bad enough, but there is worse still to come. Suppose these same sounds occur in a key to which more of them are foreign, C minor for instance:



Here we have me, see, tee for what was first sol, tee, ra; then do, me, sol; then ra, fee, la; again we have ra, fee, la for what was first fa, la, do; then do, me, sol, etc. All these names for the three sounds of the major triad. Nor is this all, for where this system is in use you will nearly always find the numbers and letters taught, and often the time names; to make a computation we have twenty-eight time names, seven diatonic syllables ten chromatic syllables, and these placed in seven different positions, then seven numbers and seven letters making one hundred and sixty-one names if my arithmetic is correct.

This is thinking sounds indirectly with a vengeance. Still we might memorize one hundred and sixty-one names if that were all, but as I have said, the seventeen syllables must be applied to seven different positions so that what we laboriously learned yesterday must be unlearned today, tomorrow and so on through the week.

I declare to you that if the same or similar practice were applied to the teaching of language reading, not half of us would be able to read the newspaper or, if in every family there were such an interchange of names every day in the week, we should long since have become a nation of imbeciles or maniacs. What wonder that the best musicians have repudiated such a method, and that nowhere does it prevail except in America. Here it has held sway for three-quarters of a century at least; two generations and a half, and how much facility in thinking sounds has it produced? How many musicians outside the ranks of the public school service do you know who read music by this system? I cannot name one and I never saw an amateur musician or a public school music teacher who would not have been a better music reader and a better musician if they had never come in contact with it. I was thus taught the scale when very young, and as I grew older I thoroughly mastered every detail of it, and even learned the time names so that I can even now sol-fa or ta-ta or ta-za fa na with fluency, but I am compelled to admit that my musical abilities and sensibilities have been injured by it beyond repair. So much for the negative side of the question, and I should be quite ashamed to thus assail the practice of so many honest teachers had I not some-

thing to offer in place of it, and an experience of years on which to base both positive and negative assertions. How then does a musician read music? In the same way in which he reads language. He looks at the representation of music and language and, presto, he knows what is therein represented so well that if a note were sung wrong or a word mispronounced he would detect one as quick as the other. How did he learn? By a similar process in both cases you may be sure. After he had been taught to speak and sing to a very limited extent by imitation, he was taught some simple way of applying his thinking faculties to the task of deciphering the signs of music and language; then he gained facility in reading music and language by an immense deal of practice, until the power to do both has become automatic. Much talk has been made in recent years regarding the superiority of the word and phonic system over the old a, b, ab, system of teaching language reading. I venture to assert that no one ever became a fluent language reader by either method alone. Of what use were they then? They furnished the learner with a method of applying his thoughts to the subject in hand, afterwards memory came to his aid and he remembered words, phrases, idioms, and sentences, and much practice made him a fluent sight reader, but I beg you to observe that he long since outgrew his method; had that method been as indirect, cumbersome, and complex as the one I have been describing, he could never have outgrown it, and would be still spelling out or giving the phonics to his words with only a little more facility than when he began. So in the study of music reading, the child must first learn to sing the little song by imitation, and thus come to believe in his power to make a little music; at the proper time, the seven numbers of the scale and the terms flat or sharp, as applied to these should be taught, and you have then given him all the names he needs in order to enable him to apply his intelligence to the deciphering of the musical signs.

Then he should read and read and read, using always a single syllable or vowel for vocalization and thinking sound directly from the notes upon the staff. Memory now comes to his aid as in the case of language reading and practice makes him a reader. This is thinking sounds directly. You may inquire why I choose the numbers in preference to the other names? Because they are already known to the child, they are logical, they stand for relative pitch and tonality, and because they are valuable to the very highest point attainable in musical knowledge. I have found them most valuable in the ear training classes at the conservatory; by means of them I have succeeded in imparting the power to write down a melody as it was sung or played, where I could not have succeeded by any other means.

I would that the time permitted me to dwell a little on this most interesting topic. I wish now to briefly refer to my experience. About ten years ago I dropped the well-known syllables and started out once more to gain the result I had labored in vain to obtain with them. The scale was taught by imitation, using the syllable *loo* only; then the class was taught to move up and down the scale at the command. Sing one, sing two, etc.; then to sing the same from the notes on the staff, but the numbers are never sung. We study the key relation and the rhythm at the same time by having the numbers spoken in the rhythm in which they are written and then, having taken the pitch, they sing with the syllable "*loo*" or with the words. In singing thus the children think of nothing but the sounds to be made and of the rhythm in which they move. They keep the time but never beat it.

During these years there has grown up in the schools a body of children who know nothing of the *do, ra, me*, syllables; the very large majority never heard of them — and yet they read music easily and correctly. I have often given as a test a song in three parts, to be sung with the words the first time, and always with a reasonable degree of success. But it was during the past year that I witnessed the best endorsement of this simple method which I have ever seen, and one which came to me as an entire surprise. In one of my high schools the study of the chorus parts of the oratorio of "*Creation*" was begun about the middle of November, 1895. The weeks from the opening of the schools in September to the first of November were spent in preparing for an entertainment. About the first of February I began to urge the school to finish up the reading of the work before the first of March, which they did, but the impression was upon me that we had begun the study of the work in September. On making some such expression before the school the master promptly corrected me by recalling to my memory the entertainment to which I have referred; so that it turned out that the entire chorus parts of this great work had been learned in just about three months, with one hour and a half a week devoted to the study of music. In conclusion, I wish to ask if I have not produced sufficient evidence to prove the immense advantage there is in thinking sounds directly rather than indirectly? If so, permit me, for the sake of the cause of public school music, to ask all of you who have hitherto taught the movable syllables, that you make the attempt to teach music without them, or any other device which compels the scholars to put something between themselves and the sounds, and that you thus test the matter for yourselves until you have proved, in your own experience, as Professor Congdon has in his, and I have in mine, that the children will become musical if we will but give them the chance.

DISCUSSION.

MISS JULIA ETTIE CRANE, Normal Institute of Music, Potsdam, N. Y.—Being one of that “large majority of supervisors of public-school music” against whose practices the speaker has made such a strong argument, I feel that I need fully as much time as he has taken in order to properly uphold my downtrodden theories. But since my time is so limited, Mr. Cole must excuse me if I take the same license allowed on a telegram, and omit all words used merely for politeness’ sake.

I shall confine myself to the simple question of singing or not singing scale names, during the elementary work of learning to read music, advocating syllables rather than numerals merely because they are more singable.

There is no doubt but that the most successful work, the world over, is done through the means of instruments. No skilled musician is ignorant of all instruments. When a ready sight reader is interpreting the printed page he has no data for judging by what processes he reaches results; but let him make a mistake, and then watch carefully the steps through which he corrects the error, and he may discover something of value for teaching purposes. I have questioned many, and I find that the pianist sees the keyboard before him, the violinist feels his fingers upon the strings, the ‘cellist corrects his errors in singing through his mental associations with the ‘cello.

The problem of the public-school teacher is to give to pupils who have never played any instrument a unit of measurement, a means by which, when they are in doubt, they may measure the scale relations with accuracy.

By what plan shall this result be accomplished?

At first the work must of necessity be slow, because the eye is not yet trained to see quickly the relations of the notes upon the staff, the ear and voice are not skilled in measuring intervals, the mental connection between the notes on the staff and the tones they represent has not been made. Here is a complicated set of mental processes to put in motion, and finally to combine in one act which seems to the ready sight-reader almost, if not quite automatic. Nevertheless it means at first that the eye must learn to see scale relations as represented in a series of complicated symbols, the voice must produce the sounds represented by the symbols, and the ear must detect the slightest deviation from the true pitch. Mr. Cole admits that the tones of the scale must be named; now, since names are necessary, what process can be more rapid or accurate than one which allows of the combination from the beginning of the three separate acts of sight reading. The notes presented to the eye are named do, re, mi, the voice sings do, re, mi, and the ear judges whether or not each syllable has its proper relations to the others. By constant repetition of the same action in the same way, all nerves are trained. Any mental process which eventually approaches the automatic gains in accuracy and rapidity through unvaried repetition.

How shall we make the most complete and direct mental connection between sight and sound? We cannot sing without saying something; we cannot name scale relations without names, we cannot learn scale relations without repetition of these names. Shall we sing them, or talk about them? Which is more direct, for pupils to sing do, re, mi, or for the teacher to call 1, 2, 3, and children to sing loo, loo, loo. Then when the first notes are presented, for children to think as

they see them, do, re, mi, and sing it, or think 1, 2, 3, and sing loo, loo, loo. Is it harmful to associate the symbols with the syllables, the syllables with the sounds, making the syllables an unchanging connecting link between symbol and sound?

If this meant "one hundred and sixty-one names," we might look with some suspicion upon the results of our reasoning. But does it? The plan suggested by Mr. Cole requires a name for each tone of the scale which children repeat in a monotone. That they do this rhythmically does not alter the fact that the repetition is not in the form in which it should be thought. The use of the syllables as names to be sung need add nothing to the number of names, for all Mr. Cole's deductions regarding the different representations of the scales are as true and as false of the numerals as of the syllables. So I put against his numerals an exact equivalent, in number, of syllables, and claim that singing them furnishes the only definite means of fixing scale relations yet offered to the child who studies no instrument.

Mr. Cole quotes his experience. Twelve years ago I, too, feared the results of constant use of syllables. I was converted from my doubts by actual experience in the public schools, and for the last eight or ten years have used syllables exclusively for elementary work.

I have seen results not inferior to those Mr. Cole quotes, and as I test pupils who have come up under this treatment I find that the syllable singing has been discarded like the burr from the ripened nut, its purpose served, its day of usefulness over. Until this stage is reached, I should as readily try to teach children to measure cloth by the eye, without the use of yardstick, as the scale without definite names to sing.

THE DEVELOPMENT OF MUSIC THEORY THROUGH PRACTICE.

BY O. E. MCFADON, SUPERVISOR OF MUSIC, MINNEAPOLIS, MINN.

Some people are born blind, others become so; some are color-blind; they perceive the light but do not distinguish colors, and thus much of beauty which others enjoy is denied them, though they cannot realize it. Another class are blind to the lines of beauty—the intensely practical sort who see no value in anything except the money value; they have eyes but, except to a limited extent, see not.

Some people are born deaf, others become so; some hear readily a call to dinner, but fail to recognize any beauty in the roar of waves or waterfalls; in poetry or in music. They either do not care to hear or do not know how. The barbarian is deaf to all music except rhythm. A grade better are those who hear nothing but rhythm and melody and demand that, to satisfy them. "Music must have some tune to it." There are many such who are so-called music students who do not play the piano but do strike the keys; they think they play or sing what they think they see, but with imperfect ideas of appro-

priate qualities of tone and with narrow ideals in general of the content of the work in hand. Both players and listeners of this class "have ears but hear not," or only partially.

The question naturally arises — what is necessary for the improvement of the hearing ability of these unfortunates? If they are adults and are out of the reach of teachers there is little hope for them except as they may voluntarily improve their opportunities of listening to good music; if yet in the schools, teachers have a golden opportunity, not to improve which would be criminal neglect.

A pupil who is never led into words of more than one syllable will never become a ready reader of language. One who never looks at more than one word at a time will read in a stolid, sledge-hammer style which gets little or no thought from the printed page, and means nothing whatever to the listener. As, in literary reading, the instantaneous grasping of phrases and sentences and their relations, and sympathy with the thoughts and aims of the author are necessary; so in music-reading the pupil must not only see the characters immediately before his eyes, and mentally hear the tones and time represented by them, but he must be able to see and feel what the parts above and below him are doing and will soon do, and get some impression of the meaning and content of the whole. The task then before us, briefly stated, is so to teach the children as to lead them up to the ability to take a birds-eye view of their work.

I think I hear you say that my requirements imply that the reader of music must have a profound knowledge of harmony in its highest forms. I do claim that the more of the right kind of theory the pupil has already digested the better he is able to grasp a composition as a whole, which is necessary to the most intelligent reading. I anticipate further that you will charge me with making my course of study "top-heavy" with theory. On the contrary, I instruct my teachers that if my requirements in theory cannot be realized by three minutes of special drill in each lesson aside from the regular singing practice, I prefer that it should not be done.

In these days of "omnibus" courses of study which include everything from whittling and making mud balls to astronomy; when music can have only fifteen minutes per day and no time for study, some are inclined to think that no time should be given to music-theory — that it should rather go by default, or just grow — like "Topsy." Others, less experienced, would teach unnecessary theories simply because it is in the books and therefore should be taught. I hereby confess that in my earlier teaching I was guilty of parceling out the definitions among the years of school life, giving to each year its proper (?) share. Thus many questions and answers having no relation whatever to the

practical work were not only uninteresting, but were positively harmful to pupils. I discovered that other teachers were getting fairly practical results without teaching theory at all. I tried it, not hoping that the extreme negative position would prove satisfactory, but rather that from the standpoint of repose I could develop in my schools a rational theory-method which would thoroughly correlate with the practice.

In this process of evolution the items naturally classified themselves into (1) those that would develop incidentally, as the characters and their uses; (2) the more profound definitions of the invisible things, such as tone, scale, measure, etc., about which there will always be difference of opinion, and (3) the theory of keys and their relations, which I do claim to be of the utmost importance. Of (1) the characters and their uses, you will agree with me that very little time should be used in teaching them. We might differ somewhat as to the propriety of teaching definitions of tone, measure, etc. One argument against doing this is that this association could easily occupy an entire session arguing for the proper wording of a single definition. Then why burden the children with matters upon which "the doctors disagree?" I believe that those teachers who do not require the learning of many definitions are equally as sure as those who do, that whenever the word "tone," "measure," or "scale" is mentioned, all pupils have as good a practical working knowledge of what is meant as if their minds were burdened with the best definitions that could be given, for what teacher is there who does not use all of these terms daily incidentally in teaching, at the same time perhaps pointing to their representations? If the learning of definitions be vital then the pupil is to be pitied who finishes his course and finds his definitions faulty.

Concerning the (3) theory of the keys, as I have intimated, I insist that a thorough knowledge is most necessary. It is too much to expect that this be developed incidentally—by absorption—the pupils doing nothing but practicing by the ordinary methods of chorus-singing. It must be given special attention, but may be done by practical methods.

In our first and second grades where we change keys daily, the pupils get a superficial knowledge of the keys or positions without necessarily learning the theory. By so doing, changing keys never becomes a bug-bear, but is always thereafter comparatively easy. In all future grades where books are used there is but one change of key each month, except momentarily where modulations occur. There are nine keys in common use, and nine working months in the year. To remain in one key for four weeks gives opportunity for the study

of that key *per se* which would not be afforded if indiscriminate and more frequent changes of keys were made. Our order of keys is C—G—D—A—E—F—, B flat, E flat, A flat. This order is followed for obvious reasons, though it might be varied, as, to a certain extent the keys are studied abstractly.

A DIAGRAM SHOWING THE DEVELOPMENT OF MUSIC-THEORY IN THE SCHOOLS OF MINNEAPOLIS, MINN.

No theory is taught in the first and second grades, but pupils in those grades change keys daily in their chart-reading work. In all grades where books are used, (3d to 8th) keys are changed only at the end of each month. This one-key-a-month plan gives opportunity for the study of the theory of keys in connection with the practice that more frequent changes of key would not afford. It is especially convenient as there are nine keys to be taught and nine working months in the year. The exercises in any perpendicular section on opposite page represents the work of one month with one key, to be repeated each other month with other keys.

		<i>Third Grade.</i>	<i>Fourth Grade.</i>	<i>Fifth Grade.</i>	<i>Sixth Grade.</i>	<i>Seventh Grade.</i>	<i>Eighth Grade.</i>
	Teacher point, class name line or space. (No.) Repeat rapidly a b c d e f g a b c, d e f g a b, etc. Repeat rapidly g, f, e, d, c and f, a, g, c. Teacher point line or space, class name tone represented; teacher point line or space, class name tone represented; (1st line, 2d space, etc.)	Commenced Completed.					
1	Teacher name tone, class name line or space which represents it. (1st line, 2d space, etc.)	Commenced.	Continued.	Continued.	Continued.	Continued.	Continued.
2	Write scales without signature. Write scales with signature.	Commenced.	Continued.	Continued.	Continued.	Continued.	Continued.
3	Sing given scale by letter daily.	Continued. Scale on Board without Signature.	Continued. Scale on Board without Signature.	Continued. Scale on Board with Signature.	Continued with Signature.	Continued with Signature.	Continued with Signature.
4	Chromatic tones and scales.		Commenced Sharps.	Continued.	Sing chromatic Scale Ascending. Sharps and Flats Commenced.	Sing chromatic Scale descending.	Continued.
5	Teacher dictate tones by letter, class sing syllables.		Commenced.	Continued, including chromatic Sharps.	Continued, including Chromatic Sharps and Flats.	Continued, including Chromatic Sharps and Flats.	Continued, including Chromatic Sharps and Flats.
6	Modulation.		Commenced.	Continued Oblique.	Continued Oblique.	Continued Oblique and Chromatic.	Continued Oblique and Chromatic.
7	The terms "diatonic" and "chromatic."		Commenced.	Completed.			
8	How to write sharps upon the staff.		Commenced.	Completed.			
9	How to write flats upon the staff.			Commenced.	Completed.		
10	Teacher call tones by number, class sing by syllable. Name tones (letter-name) when called upon.			Commenced.	Continued, including chromatic sharps.	Continued, including Chromatic Sharps and Flats.	Continued, including Chromatic Sharps and Flats.
11	Steps and half-steps (distances).				Commenced.	Continued.	Completed.
12	Kinds of intervals, (major and minor thirds and 3ds).					Commenced.	Completed.
13	Write exercises in notes on staff from figures.					Commenced.	Continued, using Chromatics.
14	Derive minor scales from major.					Commenced.	Continued.

DEPARTMENT OF MANUAL AND INDUSTRIAL EDUCATION.

SECRETARY'S MINUTES.

FIRST SESSION.—WEDNESDAY, JULY 8, 1896.

The session opened at 3 p. m. in the High School, Niagara Square, Buffalo, N. Y.

In the absence of both President Charles H. Keyes and Vice President W. H. Magruder, the meeting was called to order by the Secretary, Miss Abby L. Marlatt.

President George F. Fairchild, Agricultural College, Kansas, was elected President *pro tem*.

The first paper was given by Professor Nellie S. Kedzie, of the Kansas State Agricultural College, on "The Need of Manual Training for Girls."

The discussion was opened by Miss Abby L. Marlatt, of the Manual Training High School of Providence, R. I., and continued by Dr. Oscar Clute, President of State Agricultural College, Lake City, Fla., and Dr. Charles D. McIver, President of the State Normal and Industrial School, Greensboro, N. C.

The following resolution was introduced by Dr. McIver and referred to the Committee on Resolutions to report at the next meeting.

Resolved, That it is the sense of the National Educational Association that it would be a wise investment of a portion of the funds derived from the sale of public lands if the Congress of the United States should make an annual appropriation to each of the several states to support or aid in the support of educational institutions for the industrial education of women, corresponding to the appropriations now made for the colleges of Agriculture and Mechanic Arts, where, in many states, the work is almost entirely for men.

The second paper of the afternoon on the "Physical Effect of Sloyd Training," was read by Miss Flora J. White, of Boston, Mass.

The following persons took part in the general discussion: President Oscar Clute, of Florida; Mr. Forbes, of Rochester; Superintendent Pendergast, of Minnesota.

The following committees were appointed by the chairman:

Committee on Resolutions:

Dr. Oscar Clute, Dr. Chas. D. McIver, and President J. L. Snyder.

Committee on Nominations:

Professor Lazenby, Mr. W. H. Scott, and Superintendent W. W. Pendergast.

Meeting adjourned.

SECOND SESSION.—THURSDAY, JULY 9th.

The second session opened at 3 p. m., with President Fairchild in the chair.

The first paper was given by Professor Judson E. Hoyt, of the Stout Manual Training School of Menominee, Wis., on the subject of "Manual Training in the Public Schools of the Smaller Cities."

The second paper, given by Professor C. F. Carroll, of Worcester, Mass., was on "Manual Training and the Course of Study."

The last paper of the session was given by Professor Charles A. Bennett, Teacher's College, New York, on the subject of "The Aesthetic Principle in Manual Training."

The general discussion on all the papers was participated in by Miss Marlatt, Mr. Griffeth, of Utica, N. Y.; Miss Rice, of Providence, R. I., and Superintendent W. W. Pendergast, of Minnesota, and others.

The report of the Committee on Nominations was as follows:

For President—Oscar Clute, of Florida.

For Vice-President—Mrs. N. S. Kedsie, of Kansas.

For Secretary—Judson E. Hoyt, of Wisconsin.

It was moved and seconded that the Secretary be instructed to cast the ballot of the department in favor of the names presented. The motion was carried, and the nominees declared the officers of the department for the ensuing year.

Moved and seconded that the resolution on the Industrial Education of Women referred to the committee be presented by the President of the Department to the Board of Directors of the National Educational Association.

The department then adjourned *sine die*.

ABBY L. MARLATT, *Secretary*.

PAPERS AND DISCUSSIONS.

THE NEED OF MANUAL TRAINING FOR GIRLS.

BY MRS. NELLIE S. KEDZIE, PROFESSOR OF HOUSEHOLD ECONOMY AND HYGIENE, KANSAS STATE AGRICULTURAL COLLEGE.

The measure of the worth of an individual today is the benefit the world derives because that life exists.

A woman's life holds so many possibilities that in order to fill the measure of her usefulness she must be trained in many directions, for there is urgent need of able response to the many demands made upon her.

In the schools of a generation ago when two short terms constituted the year's work and long vacations gave time for home work, the physical and manual training of a girl came during the time she worked by her mother's side.

But today, when a year's school means nine months of severe application, while the vacation scarcely suffices to crowd in the required extra music, painting, or embroidery which it is often supposed must come into a girl's life, there is need for different work in a part of the time given to definite education.

If we could measure the evil and the wrong as well as the unhappiness and the grief that have found their way into the world because of inability to do that which quick wits and ready brains knew was needed, there would need be no argument. No question would be raised, because every hand would take all the training it could get and every woman would feel that her daughter must be deft of hand, ready with trained fingers, and that unless her hands could work out her thought, that thought was of only half value.

We find the man whose hands do only mechanical work, who is himself only able to do routine work at the dictation of some one else, is held at the foot of the long rank and file of the world's workers.

We look upon the theorist who can only think, as some one to be pitied — and the day will come when the theorist and the shoveler of earth will be counted side by side because each does only half a man's work.

It is very hard for many educators to appreciate the difference between manual training for the sake of general ability to do whatever comes under the hand, and the teaching of a trade. Herein lies

the greatest stumbling block in the teaching of girls any manual lessons.

The world is apt to think that the luxuries in education are all that are really needed for a girl's development, that the everyday matters will come to her as she needs them, that if she be given long training in years upon years of English and German literature, lessons upon rods of canvas with paint brushes, and instruction in plenty of society fads, she will consequently become the woman needed in the home, where she will one day be called to preside over the destiny of a family. So the happy girl goes on, taking what is provided for her, until one day she finds she would give all her paints for a thorough knowledge of yeast, or exchange every word of German she ever knew to be able to train her servant—or perhaps her daughter—in the proper serving of a dinner.

Not for a moment would I depreciate the value of all the study of language that can come into any life, nor would I leave out one accomplishment which will help to beautify the home, but I would urge strongly the necessity of placing these matters in the list of luxuries, and of giving to the real duties of life thought which will prepare the girl for what she will be sure to want.

Manual training means giving the ability to work out thought.

Ruskin says: "There can be no healthy thought without labor, and no happy labor without thought." The two must be together, and if the woman who thinks out the manifold duties that come into her hands has the ability to "turn off" work—she knows she is mistress of the situation.

The girl who has most power in her fingers is everywhere the girl who has most influence. If there is need of help in any direction—from the caring for the household when the mother is away, to the making of coffee at a picnic, or the dressing of a character for a charade—it is always the capable girl, the girl with deft fingers, who can step in and find herself the valuable aid in all places. Many times the "tomboy" of early years is suddenly found to be the capable girl of young lady times, and why? Simply because in her bodily enthusiasm she has pushed herself into playing out-of-door games, climbing and running, until she has been obliged to exercise her ingenuity and her fingers to extract slivers, to bait a fish hook, to dig roots, or to harness a horse.

We question as to whether all this bodily vigor may not be more profitably used if directed in channels which are planned by older and wiser heads than that of our little wild girl, and so we have learned to use the kindergarten methods, and, later, manual training.

Of course, when the piano must be practiced hours every day, the

fingers are trained and the brain transmits its thought through fingers to keyboard so rapidly that notes follow each other in quick succession. This may in itself be a perfection of manual training, the same is true of wood carving, where the quick eye must see while the deft hand will guide the cutting chisel to the fibre which is left in just the right place to make the picture, or the eye for shape and shadow sees the trained pencil outline the picture which the brain has imagined upon the paper. Any of these methods are good manual training, but for a girl there is a better line of work which will give her just as much of physical training, quite as good brain and hand work, while there must come in some knowledge of the principles upon which the training depends.

If sewing be the work required, there must of necessity come the knowledge of various fabrics, the uses of different threads, the desirability of proper patterns, the necessity of firm seams with even finish.

Not only will there be brain and hand moving together—there cannot but be additional knowledge in all the lines of work pertaining to the providing one's self with clothing. The cooking school is with us and to stay. When the manual training of a girl is along the lines of the preparation of food, there goes with this training knowledge of the production of foods, of the values of materials, and of the general effects various foods have upon the body.

If, with this knowledge, the appetite can be trained somewhat, the child has a foundation for strength that cannot be estimated. It is the untrained appetite that demands unwholesome foods, that accepts unwholesome quantities of food, and that sometimes leads to the evils of liquor and opiates. We know the old proverb that more dig their graves with their teeth than with the tankard.

The wickedness that comes into many a life is simply the effects of bodily cravings which are unsatisfied by the food taken. Many a case of nervous prostration might have been avoided by proper food, and many a broken-down student might be doing good work today had he eaten less or differently. An abused stomach takes revenge for all its wrongs.

Manual training in this line gives keenness of observation, deftness of fingers, and ability to apply knowledge of all kinds to the work in hand.

One of the vexing problems of today—the servant-girl question, will be less troublesome to the homemakers of the land if they hold in their own heads the knowledge of, and in their hands the ability to do, the tasks they set for the ignorant, untrained foreign girl who reigns in the kitchen.

No man would think of establishing a business and employing help without thoroughly understanding every process of that business. Nearly every woman has at some time in her life to carry the thought of keeping a home. Can there be any more important subject for the education of a girl? We recognize the fact that all knowledge, whether of brain or hand, is most quickly acquired in youth.

Most important is it that while the muscles are tractable, the hands pliable, such training should be given as will hold them directly in obedience to the will during all the years to come.

Manual training will do most toward accomplishing this end because it is definite regular education.

The Yankee says, "How many hands do you employ?" and he is right, for hands must be the exponent of thought.

The requisites of an educated man or woman include moral, mental, and physical training. Some one has said, "a heart to resolve, a head to contrive, and a hand to execute."

The fruit of education is character, and character builds the home. Our nation is a collection of homes. The average of those homes marks the standard the nation can attain. Upon our girls of today depend largely the homes of tomorrow.

The education we give our girls will determine to a great degree the growth of the country. The stream cannot rise higher than the fountain, and the men and women in the homes make the nation.

If every girl be taught to use all the power of which she is mistress and to be ready, capable, and deft for every task, there will be no question as to the homes, for a woman puts her best into the home she loves.

The girls themselves like the manual training. If they have been taught from their cradles to be "little ladies," and to repress much of the natural activity which is as much a part of the bodily makeup of a girl as of a boy, they turn to any kind of hand work as a relief from the book work of other hours in the day. Whatever the kind, I believe a greater number of girls like the manual training work than like any other line of study.

Can we not learn a lesson from this fact, when against tradition in education, against popular thought among educators, against the thought in many homes from which the children come, the manual training idea has grown steadily and surely. It means that the children recognize in this line of work something to enjoy.

The sewing and cooking commend themselves to girls. It is as natural for a little girl to play cook and to make mud pies as to want a doll.

We talk about the God-given instinct of motherhood, as we watch

our dainty daughters with their babies of wax or china, and may we not be quite willing to attribute the delight in cooking to the same gift? Manual training is one way to make the earnest girl into the good citizen, the happy homemaker, and the capable friend, because when a woman holds in her grasp ability to do her own especial tasks deftly, easily, and rapidly, then will there be time for her to study and ride and read and think.

The days that saw a woman when she went into a home of her own fall behind in the great procession that moves onward toward happier and better living, will be of the past, because the ability to keep the fingers up with the brains will give every woman power over whatever work comes into her hands.

If, then, manual training in her early years will help to make a woman more useful in her home, more helpful in her community, more able to accomplish everywhere the work she wishes to do, there certainly is great need of manual training for girls.

PHYSICAL EFFECTS OF SLOYD.

BY MISS FLORA J. WHITE, BOSTON MASS.

I must protest against the implication my subject carries with it that there is a physical effect of sloyd isolated from its mental effect. Surely no thought is possible that has not its ultimate connection (if not origin) in the subtle molecular changes of living tissue.

Mentality is no wraith that glides about eluding that which has substance; rather would I say it is indissolubly connected with all substances, to its veriest atom and finds its manifestation as all force in motion.

I fancy we might not be far wrong if we called motion the mentality of the body — indeed — our greatest educator has gone a step further and has called “motion the dawn of the soul,” and yet it is just here in the motions of the body where the soul dawns and the mind displays itself that we must look for physical effects. If there is a line of demarcation separating these three I am unable to find it.

In considering this subject there are two aspects which have held my attention. The hygiene, or the aspect of growth. Muscle reactions, or the aspect of development.

Now what is it we want for our youth? What is the one great common good that should come to them alike from their sloyd or Latin or science or home or any other part of their education?

The young poet cries " 'Tis life whereof our nerves are scant, more life and fuller that I want."

"More life and fuller!" I don't believe we can get beyond that. What of it though our youth master a few languages, get themselves through Euclid, write their falsetto English and all the this and that of what we call education. Fullness of life—that is the supreme test.

Get percentages on joy and exuberance of spirits of you would make safe, sane and righteous standards for your schools. If the pulses do not beat faster, longings grow stronger, doubts further deepen, and the joy of life tingle along the nerves, of what avail think you will the school and all its bookishness be toward producing a stronger, nobler race.

We want the stuff whereof splendid deeds are made. Is knowledge power? No, only that knowledge is power which is written in the tissues of the body through one's own acts. It is daring that makes men brave, not knowing that Sparta bore brave sons. It is the doing that makes grand deeds. Who is it has said, a man is never greater than the sum total of his movements.

Motion is not only the dawn of the soul—motion is the soul of the universe. In a very real sense the winds and the waves and the rocks are our brothers. As much our brothers as the little creatures whom the gentle St. Francis of Assisi, called his brothers. Who can read Herbert Spencer and not feel that he has demonstrated, that through those universal laws of motion that govern man and beast and wave alike, do we gain our perceptions of the universal?

We choose them for our youth—"more life and fuller"—we say the pathway to it lies through movement, but we must reach back of this till our finger rests on that worn phrase of science, "growth determines function," for movement is the function of life and its determining factor, growth, must be our first consideration.

I hold in my hand a living germ, the divine thing about it is its motion, which is its life token.

I ask, how may it attain to the fulness of the possibilities that lie hidden in the depths of that unknowable force pressing it outward, always outward, upon the world around it?

I close my hand and that mysterious thing we call life is gone, no man knows whither. We say no force is lost and that only a transference of energy is possible, but sure it is, the pulsating force of this slight thing has passed beyond our ken. We cannot behold it, use it, make or mar its growth. Just so, I say, do we close our hands on the life power of young children till we can only turn and twist and mold the substance which it scarce vivifies as I do this bit of lifeless protoplasm within my hand. Let us look at this germ

again, all its power, all its possibilities lay in its movements, they were forming its individual force, its individual life—a stronger motion external to itself annihilated it.

How might the life power of this germ have been cherished how might its growth have been forwarded? Manifestly by leaving a little space about it—a sacred space, where that tiny new born force should reign supreme—absolutely free in its motions from the encroaching motions of the external world.

Just so, I say, should the life power of childhood be cherished, its growth forwarded, and its motions held sacred, maybe studied on bended knees.

And what do we do? Does the state say "The life power of our children is the life power of the nation, and its motions must have free play? It is our duty and a holy one, to guard it. We will secure for each individual child life that sacred space and insure it against repressing encroachments. It shall laugh, and sing, and kick, and jump, and swim, and dive, and frolic—yes, and dance, and tumble, and plant, and pull, and pound, and build, and always have room—room for it all—for these are the throbbing, pulsating motions of the life power of childhood, and we kill it and our nation if we close our hands upon it." Does the state say this? Why then, those dreary brick buildings on small plots of ground, where children are driven into rooms by fifties and sixties, yes even by hundreds, with the hobgoblin of the law and the truant officer behind them, and then compelled to sit for five long hours each day, with what motor activities?—these movements of the fingers with pen and pencil, movements of the tongue in forming words, straining of the eyes over blurring, swimming black and white signs, or in cities of Athenian intelligence which lead in matters of physical training, given ten minutes a day in which they are permitted to stand and perform under peremptory commands certain rigid motions. Are these things out of which to get love and courage and aspirations? What has become within these buildings of the joy and laughter and ceaseless motions that make the birthright of childhood?

It is a solemn question we have to ask ourselves. I know of none more so. Do our schools lessen the laughter of young children, do they weaken their motor desires?

It has long been a fancy of mine that nature covers her face and weeps whenever she beholds a schoolhouse.

Let us not stand like the witches of Macbeth, throwing into the cauldron of the school curriculum every sort of dismembered organ we can pelf, believing that some power potent will be generated in the broth, but let us read and read well a school programme of the

best days of Greece, and reflect upon the possible relation that lies between the time there given to bodily exercise and the power and intelligence of the Greeks.

Listen to the old Greek Anaxagoras. When dying he was asked how he would have the anniversary of his death celebrated. "Let the boys play," was his answer. There was in that answer a profound knowledge of the needs of the race, and of the sort of activities on which her glory was builded.

I think it is with a touch of Anaxagoras, knowledge and wisdom that sloyd comes to the rescue of the school. It represents one phase of a rational movement which tries with a fine sympathy to develop children through their large motor activities and desires.

It has been defined by a teacher of the Boston Sloyd Training School as the adaptation of tools and materials to the needs of the growing child. This is a very broad, and at the same time, a very complete definition. I think it interprets more fully than any other the exact meaning held for it by the originators of the sloyd movement in Sweden.

Under it the tool may be a rake and the material hay, or the tool may be a stick and the material mud, or the tool may be a plane and the material wood, and so on. Only these, things must be adapted to the needs of the growing child. These needs I have already outlined as being in the direction first of growth, second of development, so that to disregard any hygienic consideration at a point where tool or material or surroundings affect the child is to exclude it from being sloyd.

Thirty children working in the same room may make models by the use of tools, but the work I can hardly judge to be sloyd. Somewhat other than the individual needs of each child has been considered in conditioning that group. Fifteen children in the same room making the same models by the use of the same tools, are far more likely to be working at sloyd. Think you there is no difference between these two groups that will affect the freedom of motion, the individuality for which I am contending? Believe me, there is the same difference to the child life that there was to the germ life between the open and the closed palm.

The crowding of our schoolrooms is our greatest sin against childhood. It is the glory of Sloyd that she was conceived with this thought enfolding her. A handful of children, not more than fifteen, with plenty of space and air and sunlight, doing things they love to do, making things they love to make, coming to this happy spot by no compulsion but of their own will daily.

If we turn once more to germ life we approach a deeper mystery

in this mystery of growth. A breath of air with its light freight of vapor passes out of its sphere of existence and becomes incarnate in this growing life.

That vision was wide indeed which saw the embryo and exclaimed:

"For it the nebulae cohered to an orb—
The long slow strata piled to rest it on—,
Vast vegetables gave it sustenance."

All nature is a glad toil to nourish the life she bears. If we leave the task to her she will nurture royally, but if we "impudently usurp her tasks" we must look well to our nourishing? She will revenge herself upon us for every neglect. We can safer leave the child to her and accept the young savage than to heedlessly cultivate and not nourish.

Shall we not be greater in our education and cease to talk of the trivial acquisitions of the hour as being fundamental. Room, nutrition, contacts, resistances, these things are fundamental, eternal, and grandly determining. Do you ask, "What has sloyd to do with nutrition, either in its mystic processes or practical provision?" It has been well said that we may wisely ask of every factor we bring into a child's life, "What is its relation to nutrition?" Shall we compel it to make bricks without straw? Shall we use energy and disregard its supply?

That first cry of the infant which gains it the oxygen for which its body hungers, should ring in our ears to remind us of that ceaseless oxygen hunger which, if left unsatisfied, defies the keenest spur to endeavor and renders growth impossible. Sloyd, with its greater room for the individual, with its active bodily movements, its lower temperature and better circulation of air, probably meets the one demand of nutrition more readily than it is met elsewhere in the schools; but more than this, it recognizes its duty and is insistent in executing it. It plans for the children's positions and movements with reference to the increase of vital capacity, excluding everything that tends to lessen it. It considers the matter of stimuli to activity, of expenditure of energy, of fatigue, in their relation to nutrition and growth. It sends its pupils from the sloyd room with more erect, alert bodies, more jubilant spirits, and a greater supply of energy than they brought to it.

And now another question following those concerning space and nutrition faces us. How is the necessary inevitable contact with the objects and motions of the external world to be effected? Shall the world be brought to the growing life, or shall the growing life creep to the world?

We dare not do other with the embryo than leave it to nature.

Do we not dare too much with the child life, meddle too much? We fuss and fret, and push and pull and teach, teach, teach, till no man can by any means tell what nature had planned.

Ought we not rather to find a guide by watching what things those tentacles of the growing life, curiosity and eagerness, lay hold upon? Shall we not fear the effect of our imposed systems of work? Shall some logical scheme tell us what children's fingers should fashion, or shall we behold what things children's fingers do fashion?

Sloyd learns of the child the road of its desires and travels along that road—hand in hand with it—beside it, not in front of it, beside it, not above it. It has been standing reverently for the past twenty years, following where childhood led the way.

Cygnaeus bared his head to child life, and for what was revealed to him strove with all the persistency of a Finn, till the elementary schools of Finland were reformed and made fit study for the world.

Herr Otto Soloman, by Cygnaeus' side, looked where he looked, and found that to which he devoted his life, creating a new era in Swedish schools, and sending forth a new hope to American schools through his pupil, Herr Gustaf Larsson, whom it is your misfortune not to have with you today.

Mr. Larsson is the leader of sloyd in this country, and he has ably demonstrated that sloyd is no finality, no system, no course of models or tools or materials, but such a use of tools and materials that space and opportunity are afforded for the growth and development of the child in the direction of his individuality.

These things I have tried to show cannot be secured without first securing room, nutrition, and the child's initiative in his work.

Cell life occupies itself in storing and spending energy. In its storage are exercised the nutritive functions. In its expenditure we make ourselves, and make ourselves known. How may this expenditure be adjusted so that it too, advances growth and development?

We are cowardly and niggardly in our spending of energy, because we have turned our backs on nature, and yet we find no system of economics to help us.

I have noticed in certain countries beyond the Tropics, trees that have impressed me with their grandeur and vigor, and then some morning I have gone forth and found them lying in the dust with helpless, upturned roots, wind-blown. Sun and shower had fondled them. With no obstacles to overcome, no winters to resist, no rocks to upturn, they had put forth a rank, showy, ineffective verdure, a growth in appearance but not in strength.

We want no wind-blown characters. Emerson admonishes us on this point. He says: "The heart and sinew of man seem to be drawn

out of him. . . . Our age yields no great and perfect persons. . . . The rugged battle of fate where strength is born we shun. . . . We are parlor soldiers."

It is our work to get back the heart and sinew of man, to get giant oaks, once more, from feeble seedlings. It is not to be done by coddling, or we gain but upturned roots, nor by neglecting, for nature will find vengeance; nor by setting brick schoolhouses on top of the young seedlings, or we get crushed lives; but if ever, by a reverent sympathy for nature and nature's ways and by a sane and conscientious child study.

.We give our children wrong things to do, then wear our lives away trying to render their doing easy. We forever aim at the acquisition of facilities rather than at the acquisition of power. Give our children right things to do, things to which their natures lead them, and the ages have bent them, and then let it go hard with them, for thus they will gain power and having that, the world is theirs with its abundant fullness of life.

Here is the meaning of the hard work of sloyd, and of the permanence of the joy and satisfaction it gives. Make it easy so there is no master endeavor, no sturdy tussling with solid, body resistances, and you disregard not only the principles of sloyd, but the principles of our wisest philosophy which demonstrates that our ideas of body, space and motion are derived from our ideas of muscular tension and are the ultimate symbols in which all other mental symbols are interpretable.

We must gauge the amount of muscular tension involved if we would gauge the educational value or its physical effects. And we must be attentive to the fact that body strength and mental strength look back to a common origin in muscular effort.

DISCUSSION.

MISS ABBY L. MARLATT, Manual Training High School, Providence, R. I.—I am most happy to lead this discussion because of my interest in the paper, and also because I have the pleasure of calling myself "One of Mrs. Kedzie's Girls." The paper has so completely touched upon all phases of the subject, that all I can now do is to add my thoughts on a few of the points mentioned.

As a teacher in high school work I have been particularly impressed with the effect of manual training on the moral nature and reasoning power of the girls.

Coming to us from the grammar schools, our girls have received that training which has most developed the memory rather than given them the power to reason upon, weigh and judge that which expanding mental powers bring within their grasp.

They have reached that stage of intellectual development when positive, even dogmatic statements of facts may be replaced by more complete appeals to individual decision. The first manual work which the high school gives to them, carpentry, not only trains the larger muscles of the hand and arm, but develops the powers of observation, and trains the judgment through its demands for the use of exact and accurate work. The pupil soon sees for herself the difference between the nearly right and what is exactly right, because even that which falls but little below the standard is embodied in concrete form from which there is no appeal. This training in exactness is carried still farther in the more advanced work of wood carving and sewing. The judgment is constantly trained to work out its own problems without the direct aid of imitation. In the work in cooking the student takes the simplest forms of food, such as albumen and starch, and herself experiments to see the effects of heat and moisture upon their properties, and by this means can reason out independently the correct methods of applying heat, so that each class of food may be rendered most easily digestible. Knowing this, and by experimental work classifying the foods, she has a foundation knowledge on which all the art of cooking can easily be reared. An excellent opportunity for comparison was given last winter in the work done by the regular students of the Manual Training High School, and a class which came for special work from the English and Classical High School. Without exception those students who had received manual training in connection with academic work were far in advance in their ability to reason quickly and correctly.

MISS CALDWELL.—Would you put the work in the lower grades?

MISS MARLATT.—Yes, I certainly should. As I was speaking of high school work that was not mentioned.

PRESIDENT OSCAR CLUTE, of Florida, spoke as follows: My attention was called to the need of this work by the condition which I found when I was called to a college in Florida. Surrounding us are all classes of uneducated people, both black and white. From personal observation I am led to say that the solution of the problem lies in the introduction of manual training into the colored schools, especially; though, if good for the colored schools it is certainly good for the white schools. Then our incompetent class will be made useful and the Southern problem will, in a measure, be solved.

DR. CHARLES D. MCIVER, President of the State Normal and Industrial School, Greensboro, N. C., desired that the association should indorse the idea that the Congress of the United States ought to make its next appropriation of funds derived from the sale of public lands to an institution in each state established for the normal and industrial education of women. The general government makes such appropriations to the colleges of agriculture and mechanical arts in the various states, but the principal work of these institutions is for men. He insisted that an educated woman is worth more to the present and future of society than an educated man, especially because she does more to propagate education. Nine-tenths of the educated women are engaged daily in the education of their own children or the children of others, while probably not more than one-tenth of educated men work daily in any educational field.

MR. JUDSON E. HOYT, of Stout Manual Training School, spoke of the great advantage of manual training in its effect on the development of the girl's character as well as on the character of the boys. There is a more business-like

atmosphere about the school and more earnest work is done. In manual training work the character of the teacher has a more direct influence because of the more intimate contact of the teacher with the pupil.

The question was asked: "Can this manual training work be put into our schools?" This was answered by Mrs. N. S. Kedzie, who closed the discussion by speaking of the manual work which was now done in all the shire schools in England, each teacher having charge of the work in their own school, but all being under direct control of supervisors.

MANUAL TRAINING IN THE PUBLIC SCHOOLS OF THE SMALLER CITIES.

BY PROFESSOR JUDSON E. HOYT, STOUT MANUAL TRAINING SCHOOL,
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In the papers which have been read before this department and the general association, the large city, almost exclusively, has been contemplated in matters relating to the need and place of manual training, and the organization and management of schools for this teaching. At that memorable meeting in Chicago, in the summer of '87, when for the first time manual training was admitted to a place in the general programme; when it occupied through an entire session with the force of a revelation, the attention of the thousands of teachers assembled; and won from them such unanimous testimony as to value and importance as an educational means, General Francis Walker, in the leading paper, discussed ably the deficiencies of the usual curriculum, the conditions of city life which call especially for mechanical education for the city boy, and the more favorable surroundings and greater ability of the large city to establish and maintain schools for this instruction. This and the other papers presented at that session are of great value, and must be read by all who would trace the growth of manual training sentiment in the last ten years. Fortunately, in treating of manual training in the smaller cities, we need only occupy the ground which was then passed by.

The force of General Walker's arguments must be admitted. With the added authority of ten years of experience, it may be asserted anew that the ordinary high school curriculum does not contain all the educational effectiveness and practical value, for any boy or girl, which it is possible to put into the time allotted to it. This is due not so much to what it contains as to what it lacks. But revolutionary modifications are not called for. The cause of manual training education has suffered much, especially in the earlier years, from the over-zeal of advocates who, from supposed necessity, to make

place for new subjects, have inveighed against the culture branches in the high school, the classics, history and literature, and who would rule out the first, and reduce the other two to a minimum. Is it not time to cease destructive criticism, to admit the special value of each of the elements of the secondary courses approved by the Committee of Ten, and to show constructively how the deficiencies in the education which they afford may be supplied without the loss of any considerable part of the training which broadens the outlook, quickens the moral judgment, or cultivates the æsthetic feelings?

Again, it may be asserted anew that at least a very large contribution toward the supplying of these deficiencies is found in the right kind and amount of manual training accompanying the academic or text-book work, over as long a period as possible.

Whether or not instruction in mechanic arts is more needed by the city boy than by the boy in the smaller communities or the rural districts depends much upon our views of the uses which such instruction is to serve. The need of the city boy is indeed great, and, no doubt, the interest of society is much more imperative that he should be supplied with the motives of using in wholesome and instructive employments his otherwise unclaimed time. But the reasons for this greater need are largely social and utilitarian rather than purely educational.

On purely educational grounds, whether the definition be that of "harmonious development," so commonly referred to as the mainstay of manual training, or that of "preparation of the individual for reciprocal union with society" which Dr. Harris proposes, as embodying a truer conception, every boy and girl, whether of the large city or of the country, needs systematic manual training as an element of general education. And nothing short of systematic training will serve the purposes of education. The mere ability to do things is not what is contemplated. The achievement of manual training teaching is a disciplinary effect upon the mind, a sense of potentiality with reference both to conception and execution, a conviction that life's purposes are attained only through contribution in some useful effort, and a willingness, established by habit, to undertake any work, however laborious, which is indicated by aptitude or circumstance. This broadening of experiences and implanting of dispositions, this getting the individual ready for the applications of faculty and knowledge to the prosecution of some useful work, cannot be accomplished by haphazard; it requires a considerable period of systematic training in a favoring atmosphere.

The greater ability of the large city to do the pioneer work in any new enterprise is obvious. The development of educational facilities

has been from above downward, and from the centres of population outward to the village and rural schools. Most of the problems of education as to organization, standards, matter and methods are to be worked out in the large cities. Here is possessed the wealth, which can be commanded through taxation or individual contribution. Here are gathered the educators of scholarship, special endowments and experience, and here are the spirit of investigation and the courage which is willing to risk money and effort for the chance of strengthening the forces that make for the increase of intelligence and the welfare of the race.

It is enough to the credit of the smaller city that it has the enterprise to appropriate these gains, and, adapting means to the special conditions of the new environment, to accomplish results which are in some fair degree comparable with those of the larger city.

The chief obstacles which impede the introduction of manual training in the smaller cities are (1) lack of knowledge of the nature and value of manual training; (2) lack of funds and the difficulty of securing them for new educational enterprises; (3) lack of settled plans and courses in the manual training work; (4) lack of qualified and competent teachers who can be secured at such salaries as command good teaching ability in the old line subjects.

Efforts for the extension of this form of educational work must continue to be directed to the overcoming of these obstacles. Many forces are working effectively to this end, and the outlook is encouraging. For the spread of information and the popularizing of the manual training idea the cause is much concerned in the success of certain schools which, by their isolation, the special problems which they have to work out, or some peculiar favoring circumstance, are attracting the scrutiny of the people. The cause, too, especially in the villages and smaller cities, is increasingly dependent upon the schools which are preparing teachers for the various phases of manual training work. With increasing frequency the question comes, where can we get qualified teachers—those who cannot only teach, but also give executive direction. These schools must enable us to answer these questions with assurance.

Among the obstacles mentioned the lack of funds is most intractable. It is not to be expected, of course, that any management can be proposed which will obviate the need of funds, nor is it desirable to encourage the introduction of manual training where means are not adequate to support well what is undertaken. But imaginary difficulties may sometimes be dispelled, by supplying information as to the actual cost of specified lines of work, and by breaking down the

impression that an expensive and costly equipment must be had before anything is attempted.

But so long as installments must await the arousing of the interest of the people in a form of educational work whose practicability and value are as yet to them undemonstrated, and the carrying of conviction to the point of providing by taxation for the total cost of equipment and current expense, the progress of manual training in the smaller cities will indeed be slow. We have not yet reached the stage where any considerable number of taxpayers, or even of the educational leaders in the smaller cities, feel that manual training is a necessary part of education. While, therefore, this field of effort should not be abandoned, but should be worked with increasing urgency, nevertheless it is well to recognize that the substantial development of manual training agencies, whether independent or in connection with the public schools, is still dependent upon the endowments or patronage of private individuals or associations. It will be recalled that the schools which have done such valuable service in the pioneer stages of this movement—the manual training schools at St. Louis, Chicago, Toledo, Cleveland, Cambridge and other points, have all had their origin or continuing support in private benefactions. No doubt, in many of our smaller cities public-spirited men and women of means can be found to whom the educational and practical aspects of manual training instruction can be made to appeal.

Another hopeful line of effort which we can take time but to mention, is toward the securing of state recognition and aid for public manual training schools. Enactments to this end exist in several of the states; as in Massachusetts, New Jersey, and Wisconsin, and are proving a helpful stimulus to the growth of these schools.

But, assuming the funds and conditions otherwise favorable, the question arises, how shall manual training be introduced into the public school system of a given small city? What shall be taught, and what shall be the relation of the new subjects to the old? These questions are inevitable, and must have for each new undertaking a definite answer. They are not always easy to answer, even when all the facts of a particular situation are known, and it is not to be expected that any set of opinions, plans or courses will be universally applicable, yet there are certain admonitions of experience, successful and unsuccessful, which cannot be ignored. At the risk, therefore, of going into tedious details, a brief statement is here presented of what seems to us best suited in subjects, organization and the management of the programme to lead to satisfactory results in the small city as usually conditioned.

The term "smaller city" is used to designate rather arbitrarily a

city of 30,000 or less. "Manual Training," for convenience, is used in its broader meaning to cover all the newer subjects or processes introduced for education, involving manipulations, delineations, and constructions, not including laboratory work in the sciences.

In the public schools the desideratum is:

1. That the manual training should be brought into close connection with the work of the usual curriculum.
2. That correlations for mutual contribution should be made at as many points as possible.
3. That this training should begin in the lower grades, or be continued from the kindergarten, and extend to and through the high school course.
4. That the exercises and materials should be carefully graded in each of the subjects, and be suited at every step to the pupil's stage of physical and mental advancement.
5. That girls as well as boys should be provided for throughout, but having reference in the higher subjects (or later years) to the differences of tastes and employments determined by sex.
6. That all should be done primarily for an educational purpose, as distinguished from industrial training, though the latter may incidentally enter.
7. That the manual training should come to have the force and relation of a method, permeating and modifying in a degree all the work of the school, rather than of a body of knowledge or manual accomplishments to be acquired.
8. And that, as general education is the aim, all children, or as many as possible who pass through the schools, should be provided with this training.

These desiderata, if correctly chosen, can best be attained, and, in the smaller cities must be, if at all, by that organization which combines the manual training subjects with those of the existing lower grades and high school courses, an organization to which Dr. Woodward, in a paper presented at the Asbury Park meeting, rather disparagingly referred to as the "annex." In so far as manual training is urged as a means of general education, and the lack of "all-roundness" is laid at the door of the existing curricula, we submit, that this training cannot be in any large measure a remedial agency unless it is brought into immediate connection with the schools in which the masses of the children and youth are receiving, and will continue to receive, their education.

In the consideration of the subjects to be chosen as the basis of this mental training, through purposeful bodily activity, we are not under the necessity of passing everything that may prove a useful accom-

plishment in after life, nor of ignoring utility as one of the strong supports of this work.

Indeed, if in certain branches, such as drawing, benchwork in wood, sewing and cooking, utility were the sole recommendation, they would still be justified in holding a place in the public schools on the grounds of their important and intimate connection with everyday life, provided they were given a proper limit of time.

MINIMUM HIGH SCHOOL COURSE.

We pass then to mention the subjects of manual training in the public high school of the smaller city, indicating as the minimum course the following:

Drawing, free-hand and mechanical; benchwork in wood; sewing and cooking.

Any high school or school system which essays manual training should give a course in these branches of at least two years' duration, running at the rate or equivalent of one fifty-minute period each day, and dividing the time between drawing and shop or manipulative lines in about the ratio of 2 to 3, in the order mentioned.

For the boys, the drawing (chiefly mechanical) and the bench work should run parallel throughout the two years, alternating in the same period of each day. For the girls, the drawing, chiefly or entirely free-hand, looking to art work, should run through the two years as one subject, while the sewing and the cooking, coming in succession, should each have about one year devoted to it.

The range of work here outlined as a proper minimum does not call for an expensive equipment; \$1,400 carefully expended, will provide all that is essential for a high school of 200 students. Nor is a building specially constructed required. Any well-lighted room, located in the same building with the high school, or in an adjoining building, may be used. At least two drawing rooms, a sewing room, a kitchen and a wood-working shop are desirable; but where extremely necessary the mechanical drawing may be carried on in the wood-working shop, and the cooking and sewing may be passably provided for in one room. True, to bear with these arrangements, so far from the ideal, and to secure good results, will require on the part of the teachers much devotion to the enterprise, patience and good management. But the beginner contemplated in this scheme is sustained by the enthusiasm of a new enterprise and the hope of better things. And these inconveniences may well be borne, even permanently, in the smaller high school, if perchance they must be, rather than forego the acquisitions, the broadening of interests, and the self-reliant, business-

like tone which even this much of manual training, well-taught, will bring to a school.

Where there is doubt as to whether the sentiment will sustain an extended course, where there is uncertainty as to what the course should be, or lack of experience on the part of those who are to manage it, it is decidedly better to make a small beginning, and to introduce new features by degrees, as experience in the particular situation may indicate.

But it is not expected that the majority of schools will remain long in this minimum stage. If beginning is made in the first year of the high school, the course should be extended downward and upward as to time and branches, and be broadened and intensified as to subject-matter, the didactic instruction, and the practice. The more favored schools will begin at once with better material provisions, buildings and equipments, and will be found teaching the fuller course as soon as the differentiations into grades and kinds of work can be effected.

For the sake of definiteness, and to indicate the kinds and amount of manual training work which can be done in a fully equipped school without detracting from the quantity or quality of work in the subjects of the usual curriculum we may be permitted to present in outline the following course. It is intended to be suited to the average high school of the smaller city, to be taught in the usual sessions, and to extend over eight years, and require, practically, one period of fifty minutes each day.

THE EXTENDED MANUAL TRAINING COURSE.

In the grades below the high school, beginning with the fifth.

1. Free-hand drawing, this for girls and boys alike, taught by the regular teachers, under the instruction of a supervisor of drawing, at least three exercises a week being given.

2. Sewing. In separate classes, the girls take plain sewing, a graded course, running three years, at two periods a week.

3. Cooking. In the next year, that of the eighth grade, the girls will take a first course in cooking, which will concern itself chiefly with the art side of the subject, and will give practice in the most elementary manipulations and the everyday foods and dishes of the average home. To have two exercises a week.

1. For the boys, besides the free-hand drawing already mentioned:

2. A course in the elements of mechanical drawing, with applications to the interpretation and the making of working drawings.

3. An elementary course in knife work and bench work in wood.

This course, together with the mechanical drawing, alternating to the extent needed, may run at two fifty-minute periods a week, and

may be taught in a room in the same building, or one which is centrally located with reference to several schools, and is set apart and equipped for this use.

The amount of teaching here outlined for the lower grades will call for the sectioning of grades, the rotation of visits of the special teachers, and an amount of duplicating proportioned to the size of the school system.

The lower grade course being now completed, the pupils take the next step. In those larger cities which maintain a separate manual training or mechanic arts high school, the promotion from this lower course will be at the option of the pupil, into this separate school, or into the regular high school, where, excepting possibly the drawing, these manual lines of work will be dropped.

But it is not expected that a city of the size here contemplated will have more than one high school, and in this one, running parallel to, and incorporated with, the academic work, the manual training subjects must be taught, if taught at all.

The high school manual training course may be in general as follows:

As to the drawing, due to the demands of other branches and the management of the daily programme, as a rule, admitting of some exceptions, choice must now be made by both boys and girls between free-hand and mechanical drawing. For the most part, the girls will continue to choose the free-hand, and the boys will take the mechanical.

For the girls then the course will be:

1. Free-hand drawing and art work. This may include drawing in light and shade, pen and ink work, wood carving, and water-color painting. The work will continue throughout the four years, two exercises a week for the first two and a half years, and five exercises for the remaining year and a half.

2. Dressmaking. The cooking, having run one year in the grade below, may now be dropped for a year's work in dressmaking. This is to include measuring, drafting and cutting of patterns, cutting and making of dresses and other outer garments.

3. Cooking. In the next year, the second of the high school, some study of physiology and chemistry having intervened, cooking may be taken up anew. The more difficult manipulations, the accessory dishes, and the refinements of the *cuisine*, together with a course in dining-room service may now receive attention. This may be followed by a course in hygiene and invalid cookery, the whole extending over a year and a half.

For the boys the course will be:

1. Mechanical drawing. This, treated quite independently as a disciplinary means, as well as for its bearing upon the parallel work of the shops, may run in two fifty-minute periods a week, throughout the four years.

2. The shop processes. (1) cabinet making, (2) wood turning, (3) pattern making, and (4) molding and casting, each to continue about one half a year; (5) forging, and (6) machine-shop practice at least, the bench work, chipping, filing, and fitting. These two last branches are to have a year each, and the entire series of shop exercises are to have three periods a week.

Having now outlined a high school manual training course, a working programme is here appended, according to which the entire work in a school numbering not to exceed 200 pupils, can be accomplished. It is believed that no high school course, as commonly organized, need be omitted from the claim that this manual training can be done without loss to the academic work, except, possibly, that preparing for the ancient classical course of the colleges, in which, however, a considerable portion can be done.

As to the teaching force required for this full course, if good special qualifications are secured at least, three divisions must be made among the subjects of instruction. The art work and the supervision of drawing in the grades may constitute one group; the sewing, cooking and other related branches, another; and the mechanical drawing and shop work, the third. Hence, at the least, three teachers will be required. But, with some assistance part time in the mechanic arts lines, three teachers, devoting full time, can provide all this teaching in a school system having a total enrollment of 2,500 children, and a membership in the high school of 200, being presumably a city of 10,000 inhabitants.

The total cost per year for instruction, materials, and subordinate help need not exceed \$5,000. At least 500 pupils would be receiving the advantages of manual training, year by year, at an average cost of \$10 *per capita*. The cost would be relatively less in a large city. When, therefore, the first outlay for building and equipment has been met, the maintenance of manual training instruction in our smaller cities should not be an intolerable burden.

MENOMONIE PUBLIC SCHOOLS.
COMBINED HIGH SCHOOL AND MANUAL TRAINING PROGRAMME—FALL TERM, 1895.

	A. M. 9:15	9:30	10:15	10:30	10:55	11:35	12
Miss H.	English, C.			Physical Geography, D.		English, D.	
Mr. R.	Latin, C.	German, B.		Latin, B.		Latin, D.	
Mr. C.	Physics, Text and Laboratory, A.		10:10		Algebra, C, Sec. I.	Algebra, C, Sec. II.	
Mr. K.	Element. Manual Tr., "Sloyd," 8th Gr., M., W.			Mechanical Drawing, A, T., T _h .		11:05 Mechanical Drawing, B, T., T _h .	
	Element. Manual Tr., "Sloyd," 7th Gr., T., F.			Machine Shop Practice, A, M., W., F.		Forging, B, M., W., F.	
Miss D.	Cooking, 8th Grade, M., W.					Dressmaking, B and Specials.	
	Sewing, 7th Grade, T., F.						
Miss M.				Water Color Painting, A, M., T., T _h , F.		Water Color Painting and Wood Carving, B, T., T _h .	
				Sewing in Grades below High School.			
				Supervision of Drawing in Grades below High School.			
P. M. 1:30	1:50	2:30	2:55	3:35	4		
Miss H.	English Literature, A.			Civil Government, D.		General History, B.	
Mr. R.	German, A.	Latin, A.			Geometry, A.		
Mr. C.	"Sloyd," 6th Gr., { Fowler Building, M., W. Central Building, T., F.		2:10	Chemistry Text and Laboratory, B.		Physiology, C.	
Mr. K.	"Sloyd," 5th Gr., { Central Building, { Fowler Building, { Codrington Bldg., { Alternating.			Mechanical Drawing, C, T., T _h .		3:05 Mechanical Drawing, D, T., T _h .	
Miss D.	Sewing, 6th Gr., { Fowler Building, M., W. Central Building, T., F.			Wood Turning and Pattern Making, C, M., W., F.		Cabinet Making, D, M., W., F.	
				Cooking and Hygiene, C, M., W., F.		Dress Making, D, M., W., F.	
Miss M.				Free Hand Drawing, C, T., T _h .		Free Hand Drawing, D, T., T _h .	
				Supervision of Drawing in Grades below High School.			

Notes—The years of the course are designated by the letters; A being the highest.

The letters in *italic* indicate the days of the week. When not otherwise indicated, recitations are daily.

MANUAL TRAINING AND THE COURSE OF STUDY.

BY SUPERINTENDENT C. F. CARROLL, WORCESTER, MASS.

During the last twenty years we have introduced into the public schools the elements of many branches of learning. In place of the three R's, we find in the course of study from fifteen to twenty specified subjects. All this change represents an attempt to bring the child into contact with life as he will find it later. It is assumed that the child in the schoolroom is already living, and that the conditions and forces of our civilization are here represented.

We are making a desperate attempt to form a course of study that will fit the new theory of education.

A few would still regard elementary instruction as principally disciplinary. Some would teach only representative studies, and others would correlate or otherwise associate kindred forms of knowledge. Finally, another class would start *de novo*, and depend very much upon a first-hand knowledge of children for suggestions in making courses of study.

Giving to the authors of these studies the respect to which they are entitled, and adopting liberally suggestions from each one, we may safely affirm that the most important elements in a human organism are, originally:

1. Curiosity, or an insatiable desire to know.
2. Abounding energy and ceaseless bodily activity.
3. Intimations of character suggested by the plasticity of the powers of a little child.

NATURE'S DEMAND.

With these axioms, I shall assume, with a brief argument, what has often been proved: Every form of elementary education is physical on one side; some form of muscular activity accompanies every normal brain reaction; either movement or inhibition is one-half of every so-called process of perception, cognition, or reflection; every kindergarten, every physical or industrial laboratory in the land, goes to prove that this is true; our life is made up either of new experiences or experiences of the past, and experience is but another term for activity.

Another well-worn, but vital argument is that parts of the brain remain forever undeveloped in any case where the finer muscles are not brought into use. The cultivation of the nerve tracts of the brain implies the development of the muscular tracts, and intelligence and

muscular refinement may be interchangeable terms. In the laboratory and in the kindergarten we find the muscles called into use. From the primary schoolroom on, all activity of the muscles has been deliberately checked. Writing calls for the minimum of action. Drawing is often even more limited in its scope. In the study of botany, zoology, mineralogy, in fact, of any of the physical sciences, there is an opportunity to restore the equilibrium, and the time is not far distant when we shall, in the study of nature, seek to relieve the difficulties of the present situation.

To a humane teacher, whose eyes have been opened, the present treatment of children in the graded system in extreme form seems nothing less than cruel and heartless. Children enter the schoolroom in the morning flushed with enthusiasm, craving an opportunity to expend their energy in our service. In ten minutes every normal inclination is likely to be repressed, every physical impulse chained fast, and a day of suffering is begun. The delightful spirit of the best teacher may do much to relieve the sufferer. The exercises of the day may be varied in point of information, may be brief and full of variety; the sanitary conditions may be excellent; but the child still has a sense of confinement, and wears the look of a prisoner. Perhaps I may exaggerate, but I think the picture is one familiar to all present.

A single element is lacking, and no substitute can take its place. In every variety of education outside the schoolroom the manual element is in some way provided for. This is true in the case of little children. Nature makes no mistake in this direction. The kindergarten takes its suggestion from nature and with unerring correctness meets the conditions.

I have not here attempted to urge in detail in what form manual training should be put into our schools, but only to prove that it is a demand of nature.

MATERIAL ADVANTAGES.

Many people object strenuously to the argument that manual training in the schools would enable the future citizen to more certainly and more comfortably make his way in the world. I will confess that I have no sympathy with the objection. I have never seen a Swiss or a Swede begging bread in the streets of America. I believe the reason why these men are so universally self-supporting and self-respecting is due largely to the fact that in Switzerland and Sweden manual education of some sort, at an early age, is almost universal. In addition to their so-called liberal education, the children, even of the most thrifty, in both these lands are skilled in some line of industrial effort. This may or may not mean that every child learns a

trade, but it does mean that every child is skilled in the use of tools of some kind. He would prefer, at any stage of life, to use these tools rather than to beg. It is a sad commentary on the so-called highly educated of many other European nations that some of them are the most hopeless and persistent beggars in our great cities. I need not say that these men are frequently a source of public discontent and strife. If I were to speak for my own boy, I should earnestly desire that he might be master of some mechanic art, as the best safeguard against poverty, and as the best assurance that he would become and remain a self-respecting citizen.

MANUAL TRAINING AND ART.

The subject of manual training as connected with art, will be considered by another speaker. Art, in any sense, is but a form of manual training, and all that can be said in favor of the development of the beautiful is an argument in favor of manual training in the schools. All that can be said in favor of lifting up man by making him able to express himself with the pencil, with the chisel, or with the rule and the compass, is an argument in the same direction.

The world passed upon this question centuries ago. The value of instruction in the beautiful, power of expression in the concrete, possession of an ideal in art by every child—all these considerations are not in debate. I mention these points here as a reminder that the civilization of the hour, in its best form, is incorporated in theory, and somewhat in practice, in our common school system. At the same time we are obliged to confess that the multitude of children in our public schools have not yet felt the saving power of the doctrine that manual training, in its best form, will make every man a self-respecting citizen, and ensure to him a livelihood, and that, in another phase, it gives a perception of beauty, and fills the soul with images and ideals that lift man above the commonplace.

WILL POWER.

There is one other phase of this subject which I wish to present. I refer to the effect of manual training upon character. If you please we may call it the training of the will. From one standpoint we may think of will power as ability to inhibit inclination and to give direction to energy and impulse. This view of the will I shall leave to the metaphysicians.

There is another view of will power which it is necessary for the teacher and educator to study. The life of the little child is very soon marked by regularity of action in certain directions that we call habit. By inheritance and by imitation, or other forces, he becomes possessed of tastes and preferences, likes and dislikes, biases. His

religious training, if he is so fortunate as to receive any, puts him in a class that tends to affect his actions. The restraint of home, or lack of it, the restraining or stimulating power of the schoolroom, all of these things, by the time he reaches the age of twelve years, give him a rating. What he has been allowed to do or stimulated to do, for several years, he does automatically. His character is a resultant of these separate forces that have been working together in his life.

The study of two or three twelve-year-old children from a city school system would furnish us much food for reflection. One child we may call a correct child. He comes from a well-ordered home. A firm hand has restrained him; a sympathetic parent has encouraged him. He has read good books and seen something of the world. He has been the favorite of his teacher, and stood well in his class. He is a good-looking, well-kept boy, and has done all that was expected of him in the school. He can solve hard problems and write a good composition. What more can be desired or expected? He really has never been called upon to do anything that was not done easily and well.

In the case of a second boy, the home conditions are much the same, but he has inherited a different temperament, and has had a stormy passage in school. Between the parent and the teacher he has been sent ahead, but he is always restless, and has interests outside that interfere with his perfect deportment. His record is only of a medium order. He is bright enough, but never could be persuaded to stick to any one thing for a long time.

There is a third character, in whose home the conditions are all different. He has imitated all that is unworthy out of school. He has been kept back in his grade, is behind in his class. He is a burden to his teacher, and her strongest desire is to get through with him and to get rid of him.

The chances are that the first of these boys will be first to fall behind in the race of life, if he is thrown upon his own resources. The correct boy, or the correct girl of the city school system is likely to be the most artificial, nerveless, unambitious specimen in our civilization. He will follow his class, whatever it be. He will be likely to accept the first position that is offered to him, and plod his monotonous way to the grave.

The second boy, who has probably been engaged in strifes with his fellows, is drawn into athletics, and learns to fight his way.

Of the third character, we can only say that in place of will a spirit of wilfulness and a desire to satisfy his lower appetites simply make him a factor in criminal life of the great city.

Leaving a large margin for error, and making allowance for exag-

geration, the three characters that I have brought to your attention fairly express what is going on in the city public school system, in the cultivation of will power.

If you can find a school system where the kindergarten takes the children very young, and immediately gives to them an opportunity to do hard things, that may be provided for in the kindergarten, I can show you a set of children whose will power has been strengthened. If you will show me a set of children where, in the early grades, modeling, or work in sloyd, or some other form of hand work, has been wisely and continuously carried on, I can show you children who have something of the perseverance of a child who has been trained to use the hoe, the ax, and the pitch fork upon the farm.

In the workshop the child attacks a block of wood. It is to be reduced in size and cut to given dimensions. With pencil and try-square, with saw and plane, with chisel and gouge, he works for many days, and perhaps for many weeks, at intervals, to produce what he sees in his mind at the outset. Every tool has a fascination for a boy or a girl. Every day he longs to get to his bench and resume his undertaking. He is never weary, he is never restless, while at this work. Bad thoughts, bad images, bad behavior, leave him while he is here. The mild-mannered boy puts on an air of energy and effort. For once these children all look alike and act alike.

Character makes very fast under such circumstances. Will power follows such an effort as may here be witnessed. This kind of education affects favorably the health and the disposition. Every day you get the best efforts of which the child is capable. Such continuous and healthful exertion universally tends to make a self-reliant man.

Those of us who have faith in this doctrine should not hesitate to affirm it on all occasions. Many of us have seen what I have here described. Many of us have watched children through ten years of such a course of manual training, and we speak confidently and calmly of the outcome of manual training in our public schools. If necessary, we speak defiantly to those who preach upon a text with which they are not practically acquainted. What we most regret is that some of those who are heard the oftenest upon educational questions have not yet caught the significance of the doctrine that manual training is from the beginning an indispensable part of a liberal education, that manual labor, long-sustained physical effort, is a factor in producing a strong healthy body, and that muscle and will are often synonymous terms. We should recognize very clearly the difficulties that are in the way of bringing about the general introduction of manual training, and proceed with due caution. More than that, we should never assume that manual training, by itself, has a high market value.

For myself, I deplore the existence of so-called manual training high schools. We should, in all cases, preserve an equilibrium between two extremes. Manual training in a high school should, in my judgment, be a course of study, on a par with other courses of study, and, at this point, should be optional.

For lack of time I have not made reference to the fact that manual training should, throughout the course, where it is possible, be closely connected with other subjects.

WHAT SHALL IT BE?

1. Clay modeling may profitably be carried on from the kindergarten through the high school. The school founded by Felix Adler in New York City, and the work done in some evening schools will furnish points in this direction.

2. Cutting or knife work, as it is technically called, has been successfully done in the schools of Springfield, Mass., and at the college for the training of teachers in New York.

3. The sloyd system has proved acceptable even with children of the lowest grades, as is shown in the schools of Brookline and by the special report on manual training by Miss Louisa Hopkins, recently a supervisor in the Boston schools.

4. Color work has been effectively introduced into the schools of Brookline, Mass., of Springfield, Mass., and in the practice department of the New Britain (Conn.) normal school.

5. Drawing, both illustrative and technical, free-hand and mechanical, commands a first place in the manual work of all grades.

6. Different kinds of apparatus to be used in connection with the study of the sciences has been constructed by pupils at the New Haven normal school and at the college for the training of teachers in New York.

7. Geometrical forms may be profitably constructed by children in all grades as may be seen in some of the grammar schools of New York City.

The cities and schools named above are but few of those that deserve to be mentioned in this connection, but they are mentioned because the writer happens to have observed the manual work that they have undertaken. A vigorous search will certainly prove that it is possible to furnish a variety of manual training work for children in all grades in the elementary schools.

IS THERE TIME?

Perhaps we should more carefully answer the question, is there time for manual training in our crowded curriculum? Not long ago I questioned a teacher of some years of successful experience upon this point.

She said in reply, "I have found it necessary to change all my methods of work. We have many reading books where formerly we had but one. We use paper and pencil instead of slate and slate pencil. As new subjects we have nature work, physiology, music, drawing, geography and history. It has been necessary for me to learn to teach all of these subjects. During these later years I have been compelled to become a student again. I must keep well-informed if I would preserve my own enthusiasm and keep up the interest of the children. I find that I enjoy my school work better and that I have improved in health. I am also surprised to find that I have more time at my command than formerly. I have more subjects to care for in the new course of study than in the old one, but I finish my assignment earlier in the year, and I believe that I do it more thoroughly. My children certainly read much better than they used to, and I think they write as well and spell as well. The work in arithmetic is, of course, more satisfactory to my superintendent and to myself. I am sure that the range of information of the children is infinitely increased. This change has come about so gradually that I am afraid I should find it difficult to describe it or to give statistics that would be of assistance to you; still I know that I have more freedom in school, that the pupils are not crowded and that a child seldom fails of promotion."

The same teacher stated that she would be glad if her children could have two hours weekly of manual training. She believed she could connect such work successfully with other work of her grade, and she was certain that such training would benefit the child morally and physically.

To reduce this testimony to two or three formulas we may say that a broader curriculum has given us new and better means of reaching the interest of children. Second, a better knowledge of children and closer sympathy with them has helped to improve the art of the teacher. The skill of the artist teacher has had a reflex effect upon supervision, and the superintendent of schools now frequently employs the skill of given teachers to improve the work of his whole force. This may be brought about either by training schools or by model lessons, or by both of these. By means of all these changes, with the addition of more and better supervision, what was formerly done in three years is now easily accomplished in two. In other words, the science and art of teaching have been so improved that under the best conditions the strain upon the child is far less than it was in former years.

All this is not theory, but is offered as evidence by those who are engaged in the business of teaching. The next great step in our profession will be to bring before the public conclusive evidence that may take the place of some of the idle discussions of the hour.

In the foregoing I first made reference to the expansion of the school curriculum and the theories on which courses of study have recently been made. In this statement I expressed the opinion that elementary courses of study should be based rather upon the natural tendencies of a child than upon philosophical classification of knowledge.

Following this was an attempt to show that the impulse of physical activity is one of the strongest in human nature. Intelligence, culture, and character, are all dependent upon activity for their development. It was urged that the effect of manual training from an early age has been to render self-supporting and self-respecting the people of several European nations. In sections of the nations referred to there is scarcely such an element as we find in large cities in most other countries. Manual training, as connected with art, has the effect of elevating the imagination and increasing our capacity for enjoyment of things beautiful. It also gives an additional and most effective means of expression. It was urged that continuous bodily effort was essential to the establishment of character or the training of the will. Our city civilization is weak and protoplasmic because it lacks the effect of such effort. The systematic introduction of manual training appears to be a partial remedy for this enervated condition of our city population; a stimulus to ambition and original effort on the part of our children.

Finally, the question was asked, is there time for manual training? By means of the system of grouping and by the use of the principles of correlation and concentration, it appears that the artist teacher, trained up to date, has better command of herself and her time than in former years. She is able to accomplish her work and assignment earlier in the year. She believes that manual training is of moral and intellectual advantage to her pupils. It is claimed by the friends of the new education that no old thing of value has been left out, essentials have received more attention and non-essentials which have tended to destroy the intellect and stupify the child are passed over very lightly. In this scheme manual training deserves and is being assigned a large place because the child himself is an organism and because at every point he learns by doing. Most of the cities of the country have in a general way accepted these familiar doctrines and are steadily reducing them to practice in the daily life of the schools. What we need most is some general acceptance of even a few of the simplest of the principles here involved — something in the way of evidence based on testimony that shall command the respect of men of influence in the community and of the teachers of the country. The appointment of a committee to produce such evidence has been proposed,

Its work would be a difficult one, but in importance it would rank first, and ought to produce results far reaching and vital to the interests of elementary education and to the civilization of the near future.

THE ÆSTHETIC PRINCIPLE IN MANUAL TRAINING.

BY PROFESSOR CHARLES A. BENNETT, TEACHERS' COLLEGE,
NEW YORK CITY.

At a conference on manual training held recently in New York City, one of the speakers said that he believed we were bound to accept the idea that manual training is a subject in the school curriculum co-ordinate with science and history, and that as a subject manual training has a development of its own based on certain definable principles. He then gave as the three principles governing its development (1) the mathematical, (2) the sociological, and (3) the æsthetic.

From the very beginning of manual training work in this country, the mathematical principle has been recognized as fundamental. It is the principle of exactness, of system, and of truth. The sociological principle which has to do with preparing the child to be a member of society, fitting him for future usefulness and giving him ability to help others, has been recognized as basal even longer than the mathematical principle. In fact it was one of the foundation stones of the Fellenberg or manual labor movement that preceded the manual training movement in this country by nearly fifty years. But the æsthetic principle in manual training is of comparatively recent origin. It has only lately come to be given anything like the attention it deserves. Its importance has long been felt by a few, but the great majority, on account of their inexperience and lack of training in art work and in art appreciation, have given it but little thought.

It is to this æsthetic principle and to some of the practical questions that immediately arise upon its adoption as a part of our creed, that I wish to call your attention this afternoon. Without excuse or argument I am going to take it for granted that we are all agreed that the free as well as the mechanical, the beautiful as well as the useful, should be found in manual training. I am going to take it for granted that manual training should touch the child's nature on the side of the feelings as well as on the side of the will.

During the last few years there has been much discussion about the value of the useful model in manual training work, until most of us are now convinced that it should be given a prominent place in courses of instruction for elementary schools. In all this discussion the chief

argument presented by those who have advocated the useful model may be found in the claim that it is more interesting to the child than the so-called abstract exercise, and therefore calls forth his best efforts. This naturally leads to the conclusion that, other things being equal, a course of study for children in the elementary schools should be made up entirely of useful articles. This conclusion very likely is, in the main, a wise one, but it is certain that in basing our conclusions entirely on such a course of reasoning, we are likely to pass by one of the most important facts bearing on the interest of children in their work in manual training. We are likely to pass by the fact that children are often more interested in the beautiful than in the useful. I suppose every teacher who has tried the experiment has found that a child will often choose to make something he thinks is pretty, although it have no use (beyond the use which it has by virtue of being pretty) instead of something that is useful that does not seem to him to be pretty. If a third object is added, one that is useful to the child and also seems to him to be beautiful, he will usually select that. A few experiments of this kind I think, will convince any teacher that if he is to plan a course of manual training in harmony with the child's natural interests and as richly educative as possible, he must place in his course pieces that are beautiful as well as those that are useful. In other words, the pieces should be desirable from the pupil's point of view and in selecting desirable pieces, beauty as well as usefulness should be considered.

Again, I believe it is well established that children are interested in beautiful things before they are interested in useful ones—that the younger children in the elementary schools are more deeply impressed with something that appears to them to be beautiful than in something that is merely useful, whereas, the older children (perhaps the boys in particular) are well pleased if they are allowed to make something useful without so much reference to its beauty. This being true, it follows that the earlier years of the course should contain pieces desirable to the children because they are considered beautiful. This does not exclude the idea of having useful articles in these years, but points the way to a broader and richer course that is more interesting to the children.

But right here we seem to have a conflict of ideas. The children in the younger classes tell us unmistakably that they wish to make beautiful things; we believe we ought to allow them to do so, yet our experience in teaching the use of tools seems to indicate that beautiful things should be placed late in the course. We reason this way: "Beautiful things can only be made when the tools are under the perfect control of the worker, and this control cannot be gained

until a large number of fundamental operations have been mastered." But is this entirely so? It is certainly true that the pupil cannot do good work in parquetry until he has mastered some of the operations in joinery. It is just as true that beautiful pieces of wrought iron work can only be done after the processes of heating, drawing and bending have been learned. But fortunately beautiful work in manual training is not confined to parquetry and wrought iron work. We may place in our courses objects which satisfy the child's desire for the beautiful, that may be made long before joinery and forging are reached, and this, too, without violating the spirit of the law that the child must gain control of his tools before he can produce results that are beautiful. This can be done by giving the child easy material to work, and tools that do not take him long to master—in other words, by giving him tools adapted to his ability. The teachers of drawing have given us good examples of this kind of adaptation in their paper work and clay modeling. Work in bent iron, using narrow strips of sheet metal, affords another excellent example. In that work the child need not know all about binding, wiring, rivetting and twisting before he can make something that interests him because it is, in a sense, beautiful. He can make a simple curve or something useful, combining two or more curves very early in this course. In a lesson or two he may learn how to bend, with a pair of round-nosed pliers, a piece of iron in such a way that it will fit a drawing that has been given him by the teacher. Or, very likely he has just been using flat-nosed pliers and finds no particular difficulty in adapting his knowledge thus gained to the use of the round-nosed pliers. He need not even be able to draw the curve he makes. In fact the drawing of the curve is a more difficult operation and in this particular case should, I believe, come after the study of the curve in iron.

In giving the child this interesting and beautiful piece of work, you have not necessarily violated the principle that the child must learn to control his tool before he can make things that are beautiful, but you have reduced the difficulties connected with gaining that control to the minimum. In like manner the æsthetic principle may be applied early in the course in simple work with the bracket saw, the knife, the chisel and the gouge.

But there is another and a much greater error that we often see illustrated in exhibits intended to show how art should influence manual training, and that is lack of refinement in design. This leads to startling as well as to most commonplace proportions, to the use of inappropriate forms and materials and to over-decoration. In order to make a thing beautiful it is not necessary to cover it entirely with relief ornament or to paint it in colors of the modern poster. Some

of the most beautiful objects are not decorated at all. Their beauty is a sort that defies decoration. They are so well adapted to their use, so charmingly simple and graceful that ornaments on them would be blots and excrescences. Useless brass ornaments could not make more pleasing the fastest locomotive in the world, whose beauty lies mainly in the perfect adaptation of part to function. The sculptured decorations of Phidias have far less to do with the beauty of the Parthenon than its exquisite proportions. Dipping a lily in dye does not improve it. Diamonds and laces could not possibly make the Venus de Milo a whit more beautiful.

Adaptation to use, appropriateness of material, subtlety of proportion, balance of parts and simplicity and gracefulness of form should be considered first in a manual training model; ornament later. A judicious use of ornament is often desirable, but there is danger that it be used too freely. Teachers of manual training should be careful not to violate the law of "the eternal fitness of things."

This refinement of design can only be found in courses planned by those whose tastes are refined and who know and can apply in their work the principles of both constructive and decorative design. Right here let me put in a plea for a course in applied design, constructive as well as decorative, in every school and college that sends out teachers of manual training. If manual training is to be based on the æsthetic principle as well as on the mathematical and the sociological, such a course is indispensable. After teachers have been given a thorough course in design we can safely trust them to encourage designing on the part of the pupils. Then, and not till then, can we safely depend less upon designs made by teachers and more upon those made by the pupils. Then we will find fewer duplicates of a given design in the work of a class, but more designs that are worthy of duplication. I would like to see the time come when there is evidence of invention by the pupils in a large proportion of the pieces produced by a given class without any indication of less refinement in design. This evidence might be found in the invention of a better method of doing the work, a change in the proportions of the piece for good and sufficient reasons, the improvement of a curve in the contour of some part, the modification of the decoration or the addition of a suitable decoration where none existed before. The exercise of the inventive faculty in this way in the early part of the course might lead to designing pieces at the end of the course that would not be monstrosities as so many pieces are today, and it would soon have a decided tendency to improve the designs used in many of our manufacturing industries and to elevate the tastes of the American people.

The æsthetic principle, then, as well as the mathematical and the

sociological should be in evidence in manual training courses. It should influence the work of the elementary schools fully as much as the work of the secondary schools because the beautiful interests the child before the useful. Beautiful things may be made by the younger children just as readily as by their older brothers and sisters, if we will but give them the use of those tools and materials best adapted to their ability. It is of prime importance that manual training work show refinement in design, and in order to insure this, it is necessary that teachers of manual training should be men and women of refined tastes who possess a working knowledge of the principles of constructive and decorative design as applied in materials commonly used in manual training work. When this principle has been fully appreciated and fully applied, manual training will be living up more nearly to its opportunities and will be fulfilling more perfectly its mission in education.

DEPARTMENT OF BUSINESS EDUCATION.

SECRETARY'S MINUTES.

FIRST SESSION.—WEDNESDAY, JULY 8, 1896.

The department was called to order at 2:30 p. m., Wednesday, in St. Stephen's Hall, Buffalo, N. Y., by the First Vice President, Durand W. Springer, of Ann Arbor, Mich., the President, Mr. Frank Goodman, of Nashville, Tenn., being detained at home by illness in his family.

Secretary J. W. Warr, being absent, the chairman appointed Mr. Allan Davis, of Washington, D. C., Secretary *pro tem*.

The chairman of the Executive Committee, Mrs. Sara A. Spencer, of Washington, D. C., reported the result of conferences of that committee with the Bureau of Education, ordered at the Denver meeting of this section, concerning a general demand among business colleges for a higher standard of attainment and more time for business training.

Extracts were given from reports to the bureau, yet unpublished, from fifty business colleges asking for "fuller courses," "more thorough work," "more time for preparatory training," "extension of commercial college courses to one, two, and three years," "better equipment of teachers," "examinations by boards of regents and state superintendents," "laws governing qualifications of teachers and standards for graduation," etc.

Fifty other business colleges of high standing, representing the great commercial centers of the United States, have not asked for these improvements, because they have already provided many of them, and are in a position to practically agree upon and help other colleges to attain a higher standard.

The chair appointed as Committee on Nominations, George W. Brown, W. H. Sadler, Durand W. Springer.

On motion of Mrs. Spencer the chair appointed as Auditing Committee, Allan Davis, J. M. Mehan.

The topic "Correlation and Co-ordination of Business Branches," was presented in a paper by J. M. Mehan, of Des Moines, Iowa.

Mr. Mehan stated that the paper represented the conclusions of the committee on this topic, Mr. Warr, Mr. King and himself being in full correspondence and accord.

The paper was discussed by R. C. Spencer, of Milwaukee, Wis.; George W. Brown, of Jacksonville, Ill.; Mrs. Sara A. Spencer, of Washington, D. C.; Mr. S. S. Packard, of New York; Mr. McAuliff, of Buffalo; Mr. C. C. Marshall, of Battle Creek, Mich.; Mr. Richardson, of Boston, and others.

The chairman of the Executive Committee urged all present to register who desired to be considered members of this department, and urged all to become

active members of the National Educational Association, stating the requirements, rights, and advantages.

"A Curriculum for Business High Schools" was presented in a paper by Mr. Allan Davis, Principal of the Business High School of Washington, D. C.

The paper was discussed by Seymour Eaton, Drexel Institute, Philadelphia; Durand W. Springer, Ann Arbor, Mich.; R. C. Spencer, Milwaukee, Wis.

On motion of C. C. Marshall a recess was taken, and the department accepted the invitation of Dr. Bryant, of Buffalo, to meet at the Bryant and Stratton College and continue the discussion of the two papers.

SECOND SESSION.—FRIDAY, JULY 10TH.

The session opened at 2:30 p. m., Mr. Durand W. Springer in the chair; Allan Davis, Secretary.

Dr. W. T. Harris, United States Commissioner of Education, delivered an address upon the "Value of a Standard of Attainment."

Mr. S. S. Packard, of New York, delivered a report for the Sub-Committee of the Committee of Nine on "Bookkeeping, Theory and Practice of Accounts and Inter-Communication." This was followed by discussion by C. C. Marshall, of Battle Creek, Mich., Geo. W. Brown, Jacksonville, Ill., and J. M. Mehan, of Des Moines, Iowa.

Mr. A. N. Palmer reported for the Sub-Committee of the Committee of Nine on "Practical Writing, a Course for Colleges and Public Schools to Answer the Needs of the People."

Mr. Melvil Dewey, Secretary of the New York State Board of Regents, delivered an address upon "High Grade Business Schools a Public Demand."

Upon motion of A. S. Osborn, of Rochester, N. Y., a committee of three was appointed to "consider the advisability and practicability of state supervision of business schools by state departments of education." The chair appointed Mr. A. S. Osborn chairman of this committee with power to select two other members.

The Auditing Committee reported approval of bills presented by the Executive Committee, as follows:

Printing 3000 Circulars, \$28.59; 3000 Carded Envelopes, \$4.75.....	\$ 33.34	
Postage, \$12.26; Telegrams, \$2.67; Newspapers, \$1.50.....	16.68	
	\$ 50.02	
Balance received from Frank Goodman, Chairman Executive Committee '95.....	\$ 8.70	
Received from I. C. McNeill, Treasurer National Educational Association.....	15.00	
<i>Contributions:</i>		
R. C. Spencer, \$5.00; Mrs. Sara A. Spencer, \$5.00; L. L. Williams, \$5.00; D. W. Springer, \$5.00; A. N. Palmer, \$3.50; C. C. Marshall, \$3.50.....	27.00	50.70
Balance.....		.68

Examined and approved:

J. M. MEHAN,
ALLAN DAVIS,
Auditing Committee.

Mr. R. C. Spencer offered a series of resolutions commending the report of the Committee on Correlation and Co-ordination of Business Branches, as expressing the sentiments of this department concerning a standard for business training. These resolutions were referred to the Executive Committee, with instructions to report to the department at the next session, one year hence, after

the entire nine sub-committees of the Committee of Nine have presented their reports.

The Committee on Nominations reported the following officers for this department, who were unanimously elected:

President—A. N. Palmer, Cedar Rapids, Iowa,
First Vice-President—J. E. King, Rochester, N. Y.
Second Vice-President—C. H. Childs, Holyoke, Mass.
Secretary and Treasurer—Allan Davis, Washington, D. C.

Mr. Durand W. Springer was appointed chairman of Executive Committee with power to appoint two other members.

A resolution of thanks to the local committee of Buffalo for providing hall, decorations, and flowers, and for general courtesies, was adopted; also a resolution of thanks to the presiding officer.

ALLAN DAVIS,
Secretary pro tem.

PAPERS AND DISCUSSIONS.

CORRELATION AND CO-ORDINATION OF BUSINESS BRANCHES.

BY J. M. MEHAN, DES MOINES, IOWA.

SUGGESTIVE OUTLINE OF BUSINESS COLLEGE STUDIES.

MATHEMATICS.

- (a) Bookkeeping.
- (b) Arithmetic, including rapid calculation.

WRITING.

- (a) Penmanship.
- (b) Shorthand.
- (c) Typewriting.

BUSINESS.

- (a) Business practice, including business methods and customs.
- (b) Business ethics.

ENGLISH.

- (a) Spelling.
- (b) Grammar and punctuation.
- (c) Correspondence, including dictation.
- (d) Composition and rhetoric.
- (e) Public Speaking.

CIVICS.

- (a) Commercial law.
- (b) Commercial geography.
- (c) Civil government.
- (d) Economics.

CORRELATION OF STUDIES.

The term correlation your committee understands to mean not only the relation of the studies in the commercial course to each other, but the relation of the school to the office, and the life of the student in the school to the conditions he will meet in the business house in which he is soon to begin his career.

Your committee has had frequent consultations and much communication regarding this subject, yet all feel that this preliminary report is unsatisfactory; but we trust it may furnish to our successors some

points to be used in a final report that shall embody the consensus of this gathering of business educators.

What ever else may be said of the business college curriculum, there is, perhaps, no other course of study, the several branches of which are so unified and correlated as are the branches forming the curriculum of the business college.

It has for its framework, its skeleton, so to speak, the science and art of Bookkeeping. Bookkeeping requires first a knowledge of Arithmetic in order that the necessary computations may be performed with accuracy and dispatch. In fact, bookkeeping is itself, a department of arithmetic.

No one can become a bookkeeper, or rather an accountant, in the true sense of the word, without a reasonably fair knowledge of Commercial Law, and thus we have a third element in the course. The bookkeeper who does not know the penalties of neglect and violation of the laws of contracts would make sorry work at the head of the affairs of a modern office.

Further, bookkeeping is an art much of which depends on good Penmanship, and thus the fourth element in the course is brought into close connection with the three studies already named. Again, bookkeeping, as a record of business transactions, cannot be separated from Business Correspondence; and correspondence as well as bookkeeping requires a knowledge of English, including Grammar, Spelling, and Composition, and so these branches are intimately connected with the subject of bookkeeping.

But, since the introduction of the typewriter into the business house, no one having any considerable amount of correspondence can dispense with its assistance, and so Shorthand and Typewriting must be added to the course.

As the work of the correspondent and amanuensis requires accuracy and close discrimination, Punctuation assumes the importance of a separate branch of study, and Rhetoric becomes necessary.

While your committee would not undervalue the work of the business college in preparing young men and women for positions in business houses, it would look beyond these to fields of broader usefulness and through a series of lectures, at least, if not in some more formal manner, would strive to teach the rudiments of business ethics.

To enforce and fix in the student's mind the principles of bookkeeping, and to assist in giving him a view of business methods and customs, to put these into practice as far as may be so that he may be more or less familiar with them, a course in Business Practice should be introduced; a feature, which in connection with intercommunication, or trading between colleges in different parts of the country,

affords not only such training, but is in addition a most excellent introduction to Commercial Geography, a branch of great importance to the future business man.

The education of a business man is not complete without the ability to stand before his peers and express his views. Public Speaking, therefore becomes a branch of business training of no little importance. And as to understand the laws relating to production, distribution, and consumption, is to understand the things of commerce in their true light and their relations to each other, a place must be found for Economics in the business course.

Further, as the various questions of government arise, and particularly of municipal government, the subject of Civil Government craves a place in the curriculum.

Your committee is aware that this outline will appear, to many, to be too extended. It is not claimed by your committee that these branches shall be considered of equal importance, some of them can, and must be incidentally taught, but they, none the less belong to the education of a business man.

SUGGESTIONS ON THE OUTLINE—BOOKKEEPING.

Your committee assumes bookkeeping to constitute the basis of the commercial course. The student should begin the study of bookkeeping only when he writes a medium fair hand, and can perform ordinary computations under the fundamental rules of arithmetic, including interest, with a fair degree of accuracy. Bookkeeping should be taught individually. Drills and lectures may be given in classes; the pupil, however, should pursue the course in bookkeeping independently of other students, except in so far as is necessary to carry out a scheme of practice as hereafter mentioned.

This plan has many advantages:

1. The student is not held back by other students who are slow, but is allowed to proceed as fast as he can do his work well.
2. He is not pushed ahead of his ability by students who are more rapid in their work, but is allowed to thoroughly master the work as he progresses.
3. This individual work in bookkeeping renders the course flexible. The student may put in all the time that he can spare from other studies on this subject, and, therefore, can always be kept busy. Where this arrangement is made, no student need be idle at any time.

Special test exercises may be given to advantage throughout the course, illustrating various applications of the principles of bookkeeping and fixing, by review, what the student has gone over.

ARITHMETIC.

The work in arithmetic to facilitate co-ordination with bookkeeping may be divided into four parts:

1. The four fundamental rules, United States money, factoring, common and decimal fractions, and denominate numbers.
2. Percentage, with its applications, profit and loss, discounts, commission and brokerage, loss and gain, simple and compound interest, and partial payments.
3. Insurance, exchange, equation of accounts, and stocks and bonds.
4. Taxes, partnerships, national and savings banks, etc.

Tests or examinations, should be given as these parts of the arithmetic are severally completed, and the student's progress in arithmetic should be made to keep pace with that in bookkeeping.

Rapid calculation should include addition, multiplication, extensions, cancellations, interest and discount.

Mental arithmetic should have a place in all written work, whether formally taught or not.

A brief, practical course in mensuration should be given to all students in the school, either in classes or as a general exercise.

The metric system, longitude and time, marine and life insurance, foreign exchange, and general average should usually be omitted. This will depend on location.

Equation of payment should be performed by the "interest system" in order to afford additional practice in interest computations and to insure a rational view of the subject.

The work in partnership settlements should be done, as far as possible, on paper ruled in forms, with statements, trial balances, etc. Work done this way tends greatly to increase the students efficiency in the knowledge and practice of accounts.

Students failing to pass an arithmetic test may proceed with their work and be given such test again when time has been given for review, providing, however, that until such work is made up the student shall not be allowed to advance in his bookkeeping.

COMMERCIAL LAW.

Commercial law should be taught as a class recitation. The students should be provided with text-books and be required to learn their lessons as in other branches. Lectures are valuable, but they should not be depended upon to the exclusion of the text-book. The applications of business law to bookkeeping should be most carefully enforced, and the use of the knowledge of law attained by the student should be used and enforced in his work in business practice. An

occasional "moot court" judiciously conducted may serve to illustrate the practical details of the principles and practice of law.

PENMANSHIP.

Your committee believes that nothing but plain, practical business writing should be taught. Students whose writing is below a reasonable standard should be made to discontinue their work in bookkeeping until their writing is improved. Figures should receive close attention, and thorough drill should be given both in their form and rapid execution. The accommodating of writing to the space to be occupied should receive careful attention. An easy, graceful movement should be early and properly taught. Unnatural and unhealthful positions of the body should be guarded against. Every teacher in the school should give attention to the writing of students in the branches taught by him, and nothing but the best work of the student should be accepted.

ENGLISH — SPELLING.

Lessons in spelling should be given daily; the teacher pronouncing the words, the student writing them in a blank book kept for that purpose. At the close of the lesson the misspelled words should be checked and written correctly on a separate slip, and at the opening of the next lesson they should be copied in the back of the blank speller. No student should be graduated from any course who has not attained a reasonable degree of ability in this branch. The passing grade should not be less than 95 per cent in the shorthand course, and 90 per cent in the commercial course; and no student should be excused from the spelling class who does not reach a grade of 98 per cent in the shorthand and 95 per cent in the commercial course. All misspelled words in whatever subject, should be corrected by the student by rewriting.

GRAMMAR.

Grammar should be taught with a view to the correction of errors in speech and writing. The subtleties of the subject may well be avoided, but those parts of what is usually termed "technical grammar," but which are necessary to the understanding of our language, should be carefully taught and persistently drilled upon. The test of all instruction should be, "Will it aid the students in the construction of the English sentence?" Grammatical blunders should not be allowed to pass, but papers containing them should be corrected and rewritten. Care must be taken that the spontaneity of students shall not be suppressed.

COMPOSITION.

Composition should receive attention in an incidental way through every paper written in school. Not less than twice each week each

student in school should submit to the teacher some paper in his own language of not less than one page of ordinary letter paper. The teacher should correct in grammar, spelling, arrangement, etc., or rather suggest the correction of each paper, with red ink, and return it for the student's examination, and, if thought necessary, it should be rewritten. As much instruction must be given in the form of lectures, etc., abstracts of these lectures should be written by the student, and when corrected by the teacher, they will form one of the best means possible for interesting and valuable composition work.

RHETORIC.

This branch, with few exceptions, must be taught entirely incidentally in our schools.

BUSINESS CORRESPONDENCE.

Business correspondence should receive most careful attention:

1. As to mechanical arrangement.
2. As to style.

A text-book on this subject should be used, and in addition to the work of the text-book, many letters should be written by the student, criticised by the teacher, and returned to be rewritten if deemed necessary. The letters of the entire class should be read in the class, signatures omitted, and comments and criticisms should be made upon them by the class applying the principles of grammar, where the same are violated.

The almost universal use of the stenographer in business offices suggests a course in dictation as a necessary element to fit one to become a good correspondent. This branch should receive attention in the practice department.

PUBLIC SPEAKING.

Students should receive, through lectures and talks, instruction on the subject of public speaking, and should be required to take part in exercises that will give them opportunity for practical training. Every student should be required to stand while reciting, and to clothe his thought in the best language he can command. This alone will aid him greatly in the art of public speaking.

BUSINESS PRACTICE.

Before entering what is usually known as "Business Practice," pupils should have something of the same qualifications they would require before going into actual work, including order, neatness, penmanship, etc. In correspondence and business forms they should have a clear idea of the mechanical arrangement of a letter, etc., and have a fair understanding of the use of the day book, journal, ledger,

cash book, sales book, bill book, etc. They should be quick and apt in journalizing, and should have passed at least the first period of arithmetic.

Your committee cannot undertake to designate what the course in business practice shall or shall not be; but takes the liberty of submitting the following propositions:

1. As the course in business practice is especially designed to correlate the school work with the work of the office, the business transacted in the business practice course should come to the student in the way it would come to him in the business house; and the business done by him and the transactions made and booked by him should be done as nearly as possible as they would be done in a first class business house.

2. The books, stationery, and appliances should be modern, well bound, of good material and style, and in every respect the equal, at least, of those found in use in business houses.

3. A reasonable variety of books should be used that the student may, when going out of the business practice department of the school, pass with confidence into the actual work of the office.

4. A sufficient time should be allowed the student in each office, or subdivision of the business practice work, to gain a fair knowledge of the detail of such office or employment. Your committee believes that a week in a bank, for instance, is almost futile, and tends rather more to confuse the student than to make plain the principles and modes of modern banking.

5. Your committee believes that from two-thirds to three-fourths of the whole time given in the commercial course to bookkeeping should be devoted to business practice work.

6. Accuracy in this department should be insisted upon to the letter, and all the "checks" possible should be placed upon the student, that this work may be done thoroughly and accurately.

7. The student in the business practice department should be taught to sacredly care for all original documents coming into his hands, to file his letters and papers with care and accuracy, and to keep everything in and about his office neat, clean and orderly.

8. The most scrupulous attention should be given to correspondence, and as the intercommunication work usually connected with this department gives rise to a large amount of correspondence which no other plan in the nature of things can, the student should be made to profit by this opportunity to develop his ability to write a good business letter. All work in this line should be performed with care and fidelity, and every letter and document written here should pass under the eye of a careful teacher.

9. A plain, easy, rapid, business style of writing without shade or flourish, should be taught in this department, and students not meeting a reasonable requirement should be debarred from the work, and receive special attention until such handwriting is acquired. A constant improvement in the student's handwriting should be insisted upon.

10. Special attention should be given to the art of bookkeeping, the proper manner of closing accounts, forwarding, etc., the handling, filing, and care of books, papers, etc.

11. The student should be taught to be exhaustive in the examination of statements and accounts, rechecking his trial balances even though they balance after the first addition; checking up all statements received, and carefully going over the second time all statements rendered. He should be taught to examine and audit books, and should acquire the skill necessary to perform these operations with reasonable dispatch.

12. The order in this department should be that of a well conducted modern office; communication between students should be allowed only concerning the business in hand; the tone of voice should be low and soft, and no unnecessary noise, heavy walking, etc., should be permitted.

BUSINESS METHODS AND CUSTOMS.

Business ethics and commercial geography may be taught through lectures, though your committee advises that where it is possible these subjects be taught in classes.

CIVIL GOVERNMENT AND ECONOMICS INCLUDING CIVICS.

These subjects are sometimes taught through lectures, but wherever it is possible to teach them in a more formal way, your committee recommends that it be done.

SHORTHAND.

Before beginning the study of shorthand the student should have a good common school education, and during the whole of the course should receive drill in penmanship, spelling, grammar, and punctuation.

WRITING SHORTHAND.

Your committee would urge that the principles of shorthand should be thoroughly mastered before any speed work is allowed. Each lesson illustrating the new principle should be copied neatly and accurately ten times with pen and ink.

READING SHORTHAND.

As much time should be given to the reading as to the writing of shorthand, for proficiency in reading is as essential as proficiency in writing, and is obtained by practice only.

SPEED WORK.

Students writing the same number of words may be grouped in classes, each student receiving personal dictation for a given length of time and reading back from his shorthand notes. A typewritten transcript for correction in spelling, punctuation, and mechanical arrangement should be made by each student daily. Classes should never be so large but that each student may receive individual instruction. A designated number of pages of shorthand should be written each day outside of the class recitation and submitted to the teacher for inspection.

SHORTHAND TESTS.

Your committee would recommend the following tests:

1. To write three hundred words in three minutes and read it back without a mistake, in the same length of time.
2. To write three hundred words in three minutes and transcribe it on the typewriter in thirty minutes.
3. To write three hundred words in three minutes and transcribe it on the typewriter in twenty minutes.

TYPEWRITING.

The student should complete some good typewriting manual and hand each lesson to the teacher without an error or erasure. After completing the manual, from five to ten pages of typewritten matter should be handed daily to the teacher for correction. The foundation for accuracy having been laid, the student should copy from new matter at a stated number of words per minute, and upon acquiring this speed dictation should be given direct to the machine.

TYPEWRITING TESTS.

Your committee would recommend the following tests:

1. To copy from manuscript at the rate of thirty words per minute for three minutes.
2. To copy from manuscript at the rate of thirty-five words per minute for three minutes.
3. To write at the rate of forty words per minute from dictation for three minutes.

Students before graduating should also be required to pass examin

ations in grammar and punctuation, with a grade of not less than 90 per cent., and to spell at least ninety-five words out of a hundred. The drills in penmanship and rapid calculation should be taken from the time the student enters until he leaves the school.

DISCUSSION.

R. C. SPENCER.—This paper expresses the sentiments of the better class of institutions and ought to be adopted as embodying the sentiments of this department of the National Educational Association.

GEORGE W. BROWN.—The success of business-college work depends upon our dealing with a few branches and teaching them thoroughly, and we should not duplicate or intrench upon the work of other schools. Ours is a special field and should be confined within definite limits.

MRS. SPENCER.—Our field is as broad as human need. The students who come to us should be thoroughly examined as to their intellectual condition, then graded, classified, and instructed to the full measure of their need. I never heard other schools criticise business colleges for encroaching upon their territory. The general criticism made by the educational world is upon what we leave undone.

We should send out well-educated, thoroughly equipped, accomplished business men and women, fully up to the standard of acquirement presented in Mr. Mehan's paper.

To overlook or condone deficiencies and graduate ignorance is to inflict a permanent injury upon the community.

S. S. PACKARD.—These differences of opinion are more apparent than real. Mrs. Spencer is right in saying that we are in duty bound to supply what students need. Any student who goes out from us unable to express himself clearly and well does us so much injury and furnishes material for enemies to use against our work.

We do teach the branches described in Mr. Mehan's paper and I am fully in accord with the sentiments therein expressed. Would not use moot courts in teaching commercial law. Danger of errors.

HUBERT J. TRAWLEY, of Buffalo.—There should be a clear, precise knowledge of what is germane. The paper has my full sympathy and endorsement. We should not minimize our work. We are not intrenching upon public or private schools when we supplement their work.

Reputable business colleges stand as high as other institutions. I am well acquainted with them East and West, and know of none that grant diplomas to ignorant students. Circumstances compel people to go out before they have completed our courses. That should not work injury to our reputation as educators.

C. C. MARSHALL.—I do not indorse all of that paper. A great deal of it we will all indorse. But there should be a widely different course for the student from Coztown, Neb., and the young man desiring to be trained for the bank or counting house of a great commercial city.

MR. F. B. RICHARDSON, of Boston, Mass.—There should be no ironclad course

of study and standard. The course can be determined by intelligent teachers according to surrounding circumstances.

MRS. SPENCER illustrated upon the blackboard a plan for a two-years' course of business training, embodying suggestions from representative business colleges, and providing time for all of the branches named in the committee's report, with a half-day per week left for the Art of Expression, or the "gospel of rest."

An optional third year's course was also presented for post-graduates.

MR. D. M. WILLIS, Commercial Department West Virginia University, urged the extension of curriculum and elevation of the standard of American business colleges to the standard of European business colleges. A degree should be conferred. Low grade business schools injure the reputation of all.

MR. F. B. RICHARDSON opposed physical culture in business colleges, as not within their scope.

MR. A. M. ROWE, of Baltimore, insisted on the necessity for an outlined course and a liberal course for the information and education of the public.

A COURSE OF STUDY FOR BUSINESS HIGH SCHOOLS.

BY ALLAN DAVIS, PRINCIPAL OF THE BUSINESS HIGH SCHOOL,
WASHINGTON, D. C.

The reasons which have led or which should lead to the establishment of business high schools or to business courses of study in high schools, have been differently expressed as the point of view of the writers has varied. In the minds of many there is the belief that the public schools should do for trade what agricultural and industrial schools do for productive industries. This is the idea of the political economist, who sees in the business school an aid to that distribution which he deems highly useful to society. The philanthropist argues, and I believe that his argument is one of the strongest we have, that such a school will widen education, both in its character and in the number of children receiving high school training. There is, indeed, a large number of young persons who cannot or will not take the ordinary high school course on account of its length or character, of whom many would be attracted to a shorter and more practical course. It is also believed by some that our ordinary courses have been largely inherited from a narrow and conservative past and that greater educational value is to be found in a course dealing with the realities that meet the pupil on emerging from school, than in one dependent for its existence very largely upon custom.

In the present paper, however, it will be assumed that the object of a business course is to create ideal business men and women, not on the supposition that the graduate will become at once a proprietor, but in accordance with the doctrine that the best assistant is one who

has a full knowledge of the results to be attained and the methods to be followed in securing them.

In the beginning, it is well to note that the business school is but one factor in the creation of the business man. In the first place nature must have done her work, and the pupil must have received an inheritance of mind and body which shall be capable of development. Then the pupil must pass through the elementary school, receiving instruction in the foundation branches. Finally, either before or after the student receives his business education, he must obtain that training which shall fit him for the special business in which he is to engage. This training may be received while he is serving as an apprentice, as a pupil in a trade school, or while applying his business training as clerk or assistant.

I conceive the following to be qualifications of the business man which the business school is to aid in producing:

1. Good moral character and polite manners. These it is the duty of the school to teach by the example of the teacher, by reproof of the individual when necessary, and by incidental discussion of the ethical principles that are the foundation of business law and business practices. I should not advise making the teaching of ethics and manners a special subject, as I have always found that the American youth resents formal discussions of this character, and also because I believe that the purpose can be accomplished much more effectively by taking advantage of the numerous opportunities to inculcate morals which occur in teaching bookkeeping or business law. A dishonored check will often speak more forcibly than the most eloquent preacher.

2. The ability to reason and to compute. Business arithmetic can be taught for both these purposes; in fact, it must be taught for both if it is to be truly valuable. As a training in deductive reasoning it can be made almost equal to geometry. In a business school, however, great stress should be placed upon facility in calculating; pupils should be made to see that certain processes largely mechanical in their nature, which like addition, seem to depend upon the action of the lower brain centers, should be done mechanically as soon as possible, that rapidity may thereby be acquired.

3. The power which results from a sound body and trained hands. This does not mean that hygiene and manual training must be taught, but it means that the spirit of hygienic instruction and of manual training should pervade every department. Desks should be suitable and properly used. In typewriting, in bookkeeping, in the office practice, the pupil should be taught to use his hands deftly and gracefully, to perform acts in the most direct manner, to subordinate the body to the will.

4. A general knowledge of the world and of business methods. This requires the teaching of commercial geography, commercial history, business law, and the study of such institutions as banks, clearing houses, and railways. Here is an opportunity for signal success or utter failure. The teacher may supply facts which pupils may copy in notebooks and memorize, with the result that there will be a certain amount of memory training, nothing more. Or, these subjects may be made the most interesting and educational of the whole course. Data may be obtained by teacher and pupils jointly, may be selected and classified by pupils under the teacher's guidance, and finally embodied in compositions, affording an English training inferior to nothing that can be found in the classical high school course.

5. The power of clear and accurate expression of thought. Composition along the lines already indicated, in connection with the critical reading of the best literature is necessary for the acquisition of ease and accuracy of expression. In addition, written expression requires skill in penmanship and spelling, while for oral expression a careful, though perhaps collateral drill in pronunciation and speaking is necessary.

6. The ability to speedily communicate thought. This is the practical necessity for teaching shorthand and typewriting.

7. The power to make complete, systematic and concise records of business transactions. This requires training in bookkeeping and office routine.

In weaving these studies into a connected course, it may be suggestive to consider the present condition of business high school courses in this country. These courses may be divided into three classes:

In the first class, of which the Buffalo high school may be taken as a type, the instruction is merely incidental to the academic or classical work, perhaps a little bookkeeping being inserted as an optional subject.

In the second class, of which the Ann Arbor high school may serve as a type, the business studies form about one-half the course, being mixed with subjects of an academic or scientific character.

In the third class, represented by the Washington business high school, the school is entirely separate from other high school departments and the course is composed of strictly business studies. This last class of school allows development along business lines, unhindered by the needs and influence of other departments, and permits that separate school spirit which gives pupils enthusiasm in their work.

I believe that a two years' course, with provision for a supplementary third year for students who have time and inclination to spend another year at school, will prove most generally acceptable for

several reasons. In the first place, a large proportion of the pupils of a business course cannot spend more than one or two years in high school training, and would therefore be attracted with difficulty to a course three or four years in length. Secondly, I doubt whether a longer course is at present a necessity. Thirdly, nearly every city high school system is an evolution, perhaps starting with a one year course and ending with a four year course. There is no reason why the business high school should not develop similarly, beginning with a short course and increasing the length as experience may dictate.

In view of the foregoing considerations I suggest the following course for business high schools

To be taught by each teacher collaterally:

Morality and politeness,
Neatness and arrangement,
Vocal culture and pronunciation,
Spelling,
Penmanship,
Physical culture.

FIRST-YEAR COURSE.

Hrs. per Week.

3. Commercial Geography and Correspondence (To be taught as a training in English as well as for their intrinsic value).
1. Grammar (To be reviewed, as a basis for punctuation, capitalization and composition).
2. Literature (To be taught to develop a love for the best reading).
1. Spelling.
3. Business Arithmetic.
4. Shorthand.
5. Bookkeeping and Business Practice.
2. Typewriting.
2. Penmanship.

SECOND-YEAR COURSE.

4. History of Commerce, Industrial History (To be taught as training in English as well as for their intrinsic value).
2. Business Law.
2. Literature.
5. Business Practice and Office Training.
8. Shorthand and Typewriting.
1. Business Arithmetic.

Optional studies: Mechanical Drawing, German, Spanish.

OPTIONAL THIRD-YEAR COURSE.

Newspaper writing,
Elementary Political Economy and Civics,
Practical Reporting,
Practical Accounting.
Some modern language.

In order that this course may be properly understood a few words of explanation are necessary. Those subjects which have been desig-

nated as collateral are not, therefore, to be supposed to be of less importance than others. They are nearly all an integral part of the regularly named topics, and should be taught and exacted by every teacher. Two of them, spelling and penmanship, may perhaps be taught separately also, but in the case of the formal teaching of spelling, I believe that it can be combined to advantage with the teaching of shorthand by holding vocabulary drills involving the ordinary reporting lists of words, in which each pupil shall be required to spell the words, give their proper phonographic outlines, and use them in sentences.

In teaching such subjects as commercial law, commercial geography and the history of commerce, I should advise making all exercises a training in composition; in fact, I believe that every teacher should be a teacher of English as well as of his special subject.

Whenever matter is used chiefly for its formal value, as in shorthand dictation or in correspondence, it should be selected with a view to its educational value also. Thus, the well written minutes of a model parliamentary assembly may be dictated for shorthand practice, giving the pupil some incidental knowledge of parliamentary law.

Mechanical drawing, at least sufficient knowledge thereof to enable the business man to make first sketches and read drawings, is desirable, but on account of lack of room it has been omitted from the prescribed course.

In choosing a language, locality and nationality should be considered. Thus, Spanish would be desirable in New Orleans, where there is considerable South American trade, while German would perhaps be more useful in a city which, like Cleveland, has a large German population.

Literature has been inserted for two hours a week in each year in order that the literary culture of the student may not fall below that of the ordinary high school pupil. While I believe that the demand for graduates who are skilled in spelling, punctuation, capitalization, grammar—the formal requisites of English—makes it necessary to give much time to these essentials of composition, it is not to be supposed that the culture side of English study is to be neglected. Pupils should be encouraged and required to do considerable home reading. They should be made familiar with Shakespeare, Macaulay, Holmes and Huxley, not by knowing their dates and something about their lives, but by actually reading some of their works. Taken in connection with the history of commerce, which in the hands of a competent instructor may readily be made an epitome of general history, this subject should lead the student to a knowledge of the best that has been said and done.

DISCUSSION.

SEYMOUR EATON, Drexel Institute, Philadelphia.—The commercial course in the average high school is a sort of side show, something beneath the dignity and superior knowledge of the professors—intended principally for boys and girls who cannot meet the examination requirements of the other courses.

This work is often in charge of a jack-of-all-trades teacher whose name appears last on the catalogue and whose salary is the smallest of the staff.

The sentiment of the school, owing largely to the stand taken by its leading teachers, is against the commercial course.

Boys who are bright and ambitious would be ashamed to own to their outside friends that they are taking the "commercial"—for "commercial" in their minds is synonymous with "bookkeeping"—and as a consequence only the less industrious students drift into this department.

This condition of things is due very largely to a sentiment which has been created almost wholly by business colleges.

It seems a pity that the business colleges of the country with all the field and all the patronage, and all the advertising, have not developed along broader lines.

They have gone along in a self-satisfied way, teaching bookkeeping and making it the Alpha and Omega of a commercial education.

Now the point I wish to make is this, that bookkeeping is not the most important subject in a commercial course. The business man can hire a bookkeeper a good deal easier and for a good deal less money than he can hire a business manager.

To train young men for office positions is one thing, and to train them for business is another and an entirely different thing.

I admit that it is very important that young men and young women be thoroughly trained for clerkships and stenographers, but don't let us call this training for business. Stenography has no closer connection with a business school than it has with a theological school. The business of a bookkeeper is to make records of business, not to do business. The proprietor and his assistants do the business. The clerk behind the counter is doing business in a truer and larger sense than the bookkeeper.

A commercial school should train for clerkships, for office positions, for bookkeepers, but this training should be simply incidental to a larger and broader training for business.

There is room for a distinct commercial course in high schools just as there are places for scientific and technical courses. The work, however, should be so thoroughly correlated that the commercial work will form a part of every course.

The engineer, architect, lawyer, doctor, is only partly educated except he is educated along business lines.

For a distinct commercial course for high schools, Professor Davis's outline should meet with general approval.

If two years can be given to such a course, the work of the first should be fundamental to the second.

I should put in the first year:

1. History of Commerce.
2. Civil Government.
3. Business Forms and Customs.
4. English.
5. Commercial Arithmetic and Mechanics.

I should put in the second year:

1. Commercial Geography.
2. Economics.
3. Bookkeeping.
4. Banking and Finance.
5. Commercial Law. 6. Business Advertising.

Carry throughout the two years Public Speaking and Parliamentary Practice.

Of all ability in use today that most in demand and best paid is executive ability.

The first year's work is fundamental, that is, they are necessary foundations upon which to build the instruction which follows. The student who has an appreciative knowledge of these subjects will have no difficulty in writing good letters, and it will matter little whether his writing is vertical or Spencerian, so long as it is legible. Shorthand and typewriting form no part of a commercial course. They are important and can, perhaps, be attached to this course as well as to any other; the young lady who is preparing herself to take down and typewrite a business letter is not training for business any more than she is training to be an architect or lawyer.

The business course, if it does anything, should train young men to be business owners and managers—in short, to do business in the same sense that technical courses train men to build bridges and medical courses train men to cure diseases.

D. W. SPRINGER, Ann Arbor, Mich.—The subject indicates separate institutions of learning, supported by taxes, whose entire aim shall be the training of youth in matters pertaining to business. I am opposed to the proposition for the following reasons: 1. The cost involved makes it unfeasable. Few cities require more than one high school. When more are needed they should be so situated in various parts of the city that the scholars may be educated at the least possible expense to themselves. I know it will be urged that the other practical course, manual training, is usually given in a separately constructed building. It is hardly a parallel case. The cost of the apparatus necessary to educate ten pupils in a manual training school is as great as the cost of that needed for twenty-five. Not so, however, in giving a business training. The large city could give one thousand pupils a business education, in five schools of two hundred each, as cheaply as it could in one school. 2. The object of introducing such work in the public schools should not be to establish something which will take the place of the business college, but rather to provide a more general course of study than it can. 3. It would be unfortunate for the student to have such separate schools. It would have a tendency to introduce the element of shop too early in life. The pupil is now seeking an education and the element of professionalism should be obliterated as far as possible. The American youth can be depended upon to hustle for the almighty dollar without being encouraged beyond a reasonable amount. It is answered that it is for its professional value that the course is advocated. Let us not agitate the question. I doubt very much whether it is legally within the power of the school boards of our cities to provide professional courses which shall be paid for out of public funds.

If the business course is taught in a separate school building the students do not come into as close contact with those pursuing other lines of work as if our high schools contained pupils who were taking different courses. What is it that makes the university a stronger training ground than the college? Not always the teachers, for the majority of the students rarely come into very intimate relationship with the master minds. It is rather the educational atmosphere that prevades the place, allowing specializations, but not at the expense of that broader education which comes from meeting with those whose lines of work differ from his. Often the entire course of a man's life would be changed had his horizon been broader during the early period of his life. 4. One of the objects of such a course would be lost if separate schools were opened, in that those pursuing other courses would not be able to take a small amount of work in this line along with their other work.

When shall the first work in a business course be introduced? In the eighth grade, instruction in business forms should be given to all pupils. In addition to this a sufficient knowledge of the principles of bookkeeping should be given to all who do not intend entering the high school that they may be able to keep a private set of books.

The regular business course should be begun at the close of the eighth grade and should be four years in length. No one should be allowed to take that course who has not completed with all the studies that would be required of a candidate for any other course. My reasons for a four-years' course are: 1. Every diploma given by the public schools should stand for an equal amount of work done. The public schools cannot afford to send out with a diploma those who have but a smattering of a general education. 2. Short courses absorb the poorest students. They place a premium upon shallowness, and we as teachers cannot afford to acknowledge that our work is not as important as any that is offered. 3. A short course is an injustice to the student. He does not stop to think as to the relative values of the several diplomas to be obtained, and is apt to strive for that which is most easily obtained.

But what of the boy or girl whom circumstances compels to leave before a four years' course can possibly be finished? Give him the best education you can in the time he is with you and then give him a certificate which sets forth what work he has done.

Of what shall a four years' course be composed? With the two years' course that has been given as a starter add German, History, Algebra, Political Economy, and kindred topics which have a distinctive educational value and at the same time will be beneficial to any person in a business career.

VALUE OF A STANDARD OF ATTAINMENT.

BY DR. W. T. HARRIS, U. S. COMMISSIONER OF EDUCATION.

[REPORTED BY MRS. SARA A. SPENCER.]

Dr. Harris said substantially: I have heard that you were discussing in this department a course of training for business colleges that may be submitted as a standard, that other schools and the business and educational world may know what the higher class of business colleges seek to accomplish and secure. I am deeply interested in what you are doing.

Many business schools have well-defined courses of study, but no course has been promulgated by an association of business colleges as embodying their ideal of a business education.

Business has to do with the aggregation and distribution of raw material and manufactures, and brings into proper relationship the producer and consumer. Civilization rests upon this work.

Farmers, miners and manufacturers consider themselves producers and regard trade and commerce as far less valuable. Yet all they produce would lie useless, to decay and perish if not distributed.

Business turns production into wealth. Business requires far more intelligence than production. It requires great ability and achieves grand results. The business man brings things together, combines them for use.

There are many thorough, excellent teachers in business schools, but they cannot always persuade young people to take the course they prescribe. In that case give them what they will take, but keep the course in their sight—as an illumination. Tell them if they cannot take it now, to go out and earn the money and come back to complete it when they can.

There is an æsthetic side to business training. Arranging things attractively is a fine art (*vide* Wannamaker). It is worth while to study the pose of figures in the Parthenon, the symposium of the gods.

The merchant should understand literature which reveals the character of a people, and helps him to understand human nature, and thence human needs.

He should be acquainted with natural science. Without this things are dead. He should be able, through natural science, to discern new combinations. A plant may produce cloth almost as good as silk and a hundred times cheaper, cheaper than cotton, and thus

one may clothe the world. The Russian peasant wears his sheepskin garment ten or twelve years for lack of this knowledge.

The educated business man sees things not like a dog or a cat, but with a halo of possibility round them.

A standard of attainment placed before a student, elevates and inspires him. He looks at it, sees what is above him, hopes to attain it. He came for a few weeks, and his whole life is changed. He now realizes that he is acquiring but a little segment of the great arc of learning. Persuade him to take more and more, till he is a rounded educated man.

Have a post-graduate course. In this course send students out to study how great business houses are conducted, and report upon them. Let them report abortive attempts at display, compare the worthy and the poor.

There have been published reports upon the higher courses of training in the business colleges of Europe. Read them.

The nation that makes the strongest things does not make the most money, but the nation that makes the most beautiful things.

I am deeply interested in what you are doing, and shall be glad to co-operate with you as far as may be within my power.

*REPORT OF SUB-COMMITTEE OF COMMITTEE OF
NINE ON BOOKKEEPING—THEORY AND PRACTICE
OF ACCOUNTS AND INTERCOMMUNICA-
TION.*

BY S. S. PACKARD, OF NEW YORK.

This exact form of subject has been given me, and I am asked to treat it broadly in the space of three thousand words. I do not object to the limitations of space, but I should like to recast the form of the subject. However, I shall try to do this in the treatment, and thus save to the committee the credit which they deserve, of building on long lines while they give me simply a plank of the platform which they have so artfully constructed. I cannot forget that one purpose of this paper is to make symmetrical a general scheme of education which shall characterize, in the best way, the work of business colleges, so that in the course of time the public may be able to understand the meaning of the term "business education." If I can in any way assist in this noble purpose I shall be much more proud of my work than I should be merely to carry a point, however dear to me, concerning methods of teaching.

BOOKKEEPING.

Bookkeeping has been variously defined and is variously understood by authors and others, depending upon individual points of view. To the merchant, or the one for whom the books are kept, it generally means a form of record which will enable him to know at any time what has happened in his business, the results of such happenings, and his actual present condition; to the teacher, who views it in its broadest aspect, it means a beautiful science which is best shown through art, and which affords a ready means of cultivating method and training the logical faculty; to the student, it seems at first simply a hard nut to crack, but as its principles and methods are comprehended, and he begins to understand its relations to the great world of business for which he is preparing, and realizes its importance in fitting him for the duties which he seeks, it becomes a fascinating study; to the uninformed public, it is a sort of necessary evil, at once the means of showing and of concealing truth; and in any view, considerably mixed. The man who owes an open account has less respect for the exactitudes of bookkeeping than has the man who is owed; however, both are better for such exactitudes, in being thus kept to a strict recognition of personal obligations and personal rights.

Bookkeeping, as best understood and clearly stated, is an adequate method of recording the transactions of a business, through the form of accounts, so as to keep the progress of the business constantly in view, and to enable the parties interested to know at any time its exact condition.

THEORY AND PRACTICE OF ACCOUNTS.

I have always deprecated the terms "theory" and "practice," as applied to the study of accounts, not because there is not a theory of accounts and a practice of accounts—or of account-keeping—but because as ordinarily used, both in discussion and in teaching, the terms are so frequently misapplied. The fact is that the theory of accounts finds its only adequate expression in practice, and the practice of accounts, if correct, not only enforces theory but is directed by it; in fact, any attempt to practice the art of bookkeeping without knowing how and why would be as abortive as it would be silly. A blind man may be able to walk, after a fashion; but a man having eyes, who should close them merely to show how well he can walk blindfolded, and should continue to do so, would promptly be called a fool.

There should be no real difference of opinion among intelligent teachers concerning this matter, and I do not think there is, when the question is properly stated or clearly understood. No inexperienced boy could be expected to keep books, according to any system, with-

out being told, in some way, how to make the entries, and no intelligent boy would continue to make the entries, even if told how, without desiring to understand the reasons. Neither would an intelligent and faithful teacher ask him to continue without telling him the reasons. That is all there is to theory; and if the teacher's main purpose is not to give this kind of aid to the learner I should be troubled to know what his real functions are. There is probably no other study in which theory is more constantly or more adequately tested by practice than it is in bookkeeping; and hence, I remark that I sincerely deprecate any attempt to construct or to recognize a method of teaching bookkeeping which shall separate theory from practice. The student of bookkeeping, if properly started upon his course, will have to do with both theory and practice in his first lesson. He has to study the science of accounts in order that he may know how to keep accounts; and the best way for him to comprehend and hold his instruction in the science is to apply it at once, in the way and under the forms that he will use as a bookkeeper. Perhaps I can best enforce this thought by giving my idea of the logical order of teaching.

First, as to theory. To understand the science of accounts and the practice of keeping accounts, it is first necessary to understand the individual accounts, their purpose and form. So, I would say to the new student: "An account is a collection of corresponding facts, under a proper title, so arranged by comparison as to show a definite result. The definite results required to be shown relate first, to the investment; second, to the cash on hand; third, to the debts owed to the business; fourth, to the debts owed by the business; and fifth, to the separate gains and losses." These are fundamental, incontrovertible facts, which the student must get into his mind at the beginning and keep there. It would not hurt him to commit them to memory, but that is not essential, and perhaps not best. He can be shown their force and meaning, and thus be able to retain them, by giving him individual examples, and forcing him to keep in mind the form of the account, which consists of arranging opposing facts on the opposite sides, and the purpose of the account which is ascertained by finding the difference between the sides.

Concerning investment, for instance, the pupil is required to write down the name of the proprietor as the title to the first account; to draw underneath it a perpendicular line. Then, on the right side of the account so formed, he will write down the sums that have been invested by the proprietor, and on the left side, the sums that have been withdrawn. It will not take him long to see that the difference between the total amounts invested and the total amounts withdrawn

must be the net investment; and when he has wrought that out, as he will be required to do, he will be able not only to appreciate the logical facts of the account itself, but will have taken an important step in the art of bookkeeping—in other words, will have begun the practice of bookkeeping.

In the same way he will learn to apply the test of cash on hand by opening a cash account and placing on the left hand, or debit side, the sums received, and on the right, or credit side, the sums paid out, and taking the difference between the two. When it comes to personal accounts he will more clearly see the significance of the terms debtor and creditor, and will have no difficulty in getting at the fact of debt, either for or against the business.

As to the accounts which show gains and losses, the same logical arrangements exist and the same system of cancellation, leaving the difference to represent net gain or net loss.

Having fixed in his mind, through these exercises and those which should follow the theory of bookkeeping, and having developed through his constant use of the pen the art or practice of bookkeeping, he is prepared to advance into the more difficult realms of diversified forms and mixed transactions, taking the transaction from its inception, through the books of original entry, to its final record in the ledger. His books begin eventually to assume a more elaborate, complete and artistic appearance, and he to realize that he is doing the very work that will be required of him, on broader lines, when he shall have entered the world of business. As he proceeds, he finds himself growing conversant with the nature of the transactions or business which he is required to record and the labor growing out of such transactions, such as writing out the forms of notes, drafts, bills of exchange, receipts, contracts, stipulations, etc., and of conducting the necessary correspondence which the business involves.

Some teachers may consider it necessary at this point or even at an earlier stage, to introduce what may be called business routine or manipulation, to give the student, either verbally or through a printed guide, such hints as will enable him to suggest and perform assumed transactions of his own, with or without prescribed results, and with or without definite ideas as to what the general results should be. This method seems to have charms for certain teachers and certain students, and if properly directed and properly circumscribed, has its merits. I have tried it, both on a limited and on a large scale, and have come to the final conclusion that the best way to secure definite and positive results is to guide the student in his operations. The mere practice of so-called buying and selling, either in large or small quantities, with a view to evolve records therefrom, while inci-

dentially pleasing and sometimes instructive, is apt to fail from lack of proper sequence and definiteness of purpose.

The objections sometimes urged by enthusiasts to instruction gathered from a text-book lose their force wherever the text-book is adequate. It does not require much thought to see that if the author—who must necessarily be a bookkeeper—understands his business he can manage the student much better than the student can manage himself; and that inasmuch as the whole purpose of studying book-keeping is to become a practical accountant, the superior knowledge and trained methods of the author, assisted by the intelligent teacher, can be more safely relied upon for results than the inner consciousness of the inexperienced learner, however imaginative or ingenious he may be.

In order to supply any additional desires or needs the student may have for what is called practice, I have found it well to introduce, at different stages what I call practical tests, consisting of a system of correspondence, which though conducted within the school and as a part of the prescribed course has precisely the effect of coming from the outside. Each one of these tests comprises material for a complete set of books, together with all the incidental documents, correspondence, etc. The instructions, hints, or intimations of each transaction, in its order, come within a sealed envelope, wherein will be found all the forms and documents which such transaction would require, with blanks for the student's use in completing his part of the work. To make the work realistic and to realize the purpose for which it is intended as a test of previous instruction, means are provided for the reception and disposition of goods, letters and papers of whatever kind; nothing, in fact, being omitted which is necessary to make the understanding of the transaction and its record complete.

It must be borne in mind that the mere statement of a fact to the ordinary student of bookkeeping is rarely ever sufficient, but that constant repetition of the same or similar transactions so as to enforce the principles as well as the perfect record is generally essential. It is the business of every teacher and every school of bookkeeping to make expert accountants, not merely routine bookkeepers. There are plenty of "hewers of wood and drawers of water" in the profession, who come to their estate through methods of self-training, or no methods at all. Let us not add to them, but rather, let it be our business to do for the bookkeeping fraternity what West Point does for the military service. Let our graduates be fully equipped accountants, ready to do whatever work may come to them, and able to judge intelligently of other people's work.

INTERCOMMUNICATION.

The term intercommunication as used by the committee, refers to a line of work that has been in practice among the best schools for the past twenty-five years. It relates to business transactions done between the different schools rather than to that confined within the individual schools, and it does not require much imagination to conceive that herein can be realized the highest type of what we call business practice. It is, in fact, the embodiment of the business idea. In all the reputable business schools there are established and in daily operation "banks," transportation" offices and "business houses" of various kinds, comprising the required facilities or machinery for managing whatever business may come, from whatever source. A general code of procedure is agreed upon by the schools in correspondence, and a thorough understanding had as to all details involved. Concerning methods or forms of record, no more uniformity is requisite than in business houses that correspond, thus each school is left to enforce its own methods and its own independent ideas. The charm of this co-operative plan lies in its realistic character, and in the possibilities it affords for instructive work. The business is done entirely through correspondence, involving the necessity of extensive letter writing, and the sending and receiving of business papers of all kinds.

Some time ago I took occasion to inform myself as to the extent to which this system is practiced in the commercial schools of the country, and was exceedingly gratified with the information gathered. Nor only are a large proportion of the schools, both east and west, engaged in intercommunication, but the extent of the work done in each school is impressive. A teacher from a western school who has had four years of experience in this method says: "I consider intercommunication the rational and business-like method of teaching bookkeeping. When properly conducted it is so near akin to business itself that the student becomes so interested in its realistic methods that the drudgery of the schoolroom is forgotten, and he is inspired to do his best work, both for the love of it and because he knows his efforts must pass not only the inspection of his own teacher, but the possible criticism of his correspondent, as well as the teachers and pupils of his corresponding school. In fact, nothing could more surely tend to excellence of achievement than this constant comparison of the work of one school with that of the others. The school which I have in charge has an average of fifty or more correspondents, which means that we are in receipt of from fifty to seventy-five letters a day, each letter containing a remittance, or an order, or a

statement, requiring prompt attention, or correspondence upon matters of mutual interest.

And in this respect we represent a very large number of schools, east and west, who have found in this simple, natural, suggestive method of enforcing the theory and practice of bookkeeping as well as the routine of office work an invaluable aid to the future accountant. In fact, with my experience, I can hardly conceive of a school deserving the name that should voluntarily neglect this culminating means of sending out into the business world well-equipped workers.

I wish it were possible, within the space at my command, to give my estimate of the study of bookkeeping in the business college curriculum. Whatever else may be said of us, or expected of us, as educators, we can never ignore the fact that our great work, the work for which we are held responsible by the public is to make efficient clerks or helpers in the business world, not that they are to remain helpers—that part will take care of itself. Our graduates average from eighteen to twenty years of age; and they properly expect to begin their business career with the attainments which they receive at our hands. As bookkeepers, in whatever grade, they are expected to be conversant with the principles and practices of the profession, to do the details of office work, and to have a more or less comprehensive knowledge of business in its broader aspects. As stenographers, they must have available skill in the art of shorthand, with a sure knowledge of the meaning of words and of the technical expressions peculiar to the different departments of business and the professions, and an equipoise of manner which comes from a conscious knowledge of the requirements of their work. While the twenty year old accountant is not likely to be entrusted with the immediate direction of great financial affairs, and while he may be ignorant of those qualities of shrewdness in trade and the level-headedness which years of experience alone can give him, he must, nevertheless, be prepared for the duties immediately before him. To be a thorough accountant he must necessarily be a good mathematician, a creditable penman, must be able to use language with directness and effect and, in fact, have within himself the making of a man.

In the correlation of studies which make up a business college course bookkeeping must always stand pre-eminent. It is the one study that is most likely to be neglected in the ordinary schools, the one study of which the fully equipped classical teacher is usually ignorant, and which the preparatory schools have so far failed to teach in any adequate way. The work of making accountants has,

by universal consent, been relegated to the special schools which are represented in this association, and whatever else these schools may do or attempt to do, if they fail in the one thing of sending out efficient bookkeepers and efficient stenographers, they fail utterly.

DISCUSSION.

CHARLES C. MARSHALL, Battle Creek, Mich.—The training that prepares young people for becoming prompt, accurate and reliable business men and women should constitute the main work of the commercial school.

How can this training best be secured? Business college teachers can discuss no more important question.

We all agree that an adequate education involves more than a knowledge of bookkeeping by single and double entry. We also agree that the course should consist of two leading ingredients—somewhat loosely termed theory and practice—but regarding the proper relative proportions of these ingredients, and the manner of combining and presenting them we differ as widely as may be.

The distinguished leader of this discussion has hitherto gone on record with the proposition that the ledger account is the proper unit of study for the bookkeeping student. In the series of text-books of which he is the author, he carries out the idea by devoting the first part of his book to an illustration of twelve different classes of accounts. In support of this method of procedure, he has hitherto argued that, as an accountant is one who understands accounts, the first step in bookkeeping instruction should be the investigation and study of the account.

This is virtually the position assumed by most other authors of bookkeeping text-books, and the embodiment of this idea in the schoolroom may be called for the sake of distinctiveness, the text-book, or expositive method of teaching accounting. As a rule, those who employ this method, insist that systematic exposition should precede practice, and only when this expositive matter is mastered do they permit the student to engage in business practice in the so-called "practical department." As to the method of work in this practical department, there is little uniformity among the theory schools. In some, the outward forms of the business world have been pretty closely copied, and the practical department is formidably equipped with various "banks," "commission offices," "wholesale houses," "real estate offices," "post offices," and the like.

During the closing weeks of his course the student is required to "do business" with these offices, following a routine of made-up transactions involving such business. Some schools have supplemented this routine with a federative system, called "inter-communication," in which the students are required to buy and sell by letter with the students of other schools in the federation.

The length of time given to the supplementary work of business practice may vary from two to three weeks to as many months. In the work of this general class of schools, there is always a pretty sharply defined boundary between the theory and the practice, both as to time and the methods of presentation. The theoretical and the practical departments are usually in different parts of the building, are presided over by different teachers, and are entirely separate and distinct features of the school.

In sharp contrast to this method of training, is the work of another and rapidly enlarging class of schools. In these institutions, there is no attempt to separate theory and practice. Instead of devoting the beginning student to a study of the so-called "science of bookkeeping," he is at once set to perform simple but fac-simile business transactions, preparing the necessary papers and making the required records in accordance with prescribed forms.

Generalization follows illustration and theory accompanies and illuminates the student's practice. To give interest, vitality and effectiveness to the work, the whole school is organized into a miniature business community, that embraces, as far as it is practicable, every concomitant of real business life. As far as possible, each student is allowed to originate his own transactions, and he is put under only such limitations regarding these as may be essential to a proper development of his work. Everything is made as real as possible, the students employing current dates, handling representative cash and merchandise, and conducting dealings with one another.

By this method it is assumed that a theoretical knowledge of bookkeeping is not the main purpose of the student's effort, but that the chief object is that he may learn how to do business readily, systematically, and accurately, and also learn how to keep books.

In this system, the business transaction, not the ledger account, is made the unit of instruction. It is assumed that as bookkeeping records usually have their origin in contracts of purchase or sale, that the method of performing and properly disposing of these transactions should first engage the student's attention. It is claimed that this method has a number of evident advantages over the plan of making the ledger account the basis of the student's work. In the first place it is natural and logical, and conforms to the procedure in real business life. It also gives life to the student's work by adding a personal interest. I know the plan has been sneered at as "play business," but the fact remains, that this introduction of the personal factor, aids marvelously in awakening the student's interest, holding his attention, and developing his sense of responsibility, advantages that will be recognized by every good teacher. But while business practice forms the basis of this training, the method by no means neglects the theory and practice of accounting. At the proper time and in the natural order all essential principles of bookkeeping are fully exemplified. The main advantage of this system of training is that it accomplishes all that is attempted by the ordinary text-book, and much more. It not only makes of the student an intelligent bookkeeper, but it gives him a capacity to perform transactions, and a ready familiarity with every day business usages that can only come through actual practice.

The system of instruction thus briefly outlined, has been variously called "business practice," "actual business," or "business community" work, and this matter of names has occasioned some comparatively profitless and unnecessarily acrid discussion, the disputants apparently forgetting that the method is vastly more important than the name.

While the business community idea is not a matter of recent discovery, its employment has greatly increased during the past few years. This has been owing (1) to the recently devised mechanical methods of regulating the amount and character of the community transactions, and (2) to the widespread discussion that the adoption of these methods has brought about. At present there can be no doubt of a general and growing tendency to enlarge the scope of business practice, or actual business work, in the commercial school. Whatever the

cause for the abandonment of certain sporadic business community schemes, inaugurated in some schools years ago, the remarkable and growing popularity of the method is at this time plainly in evidence, and gives every promise of being permanent.

I am at this time under limitations that prevent my offering any adequate affirmative presentation of the claims of business community teaching, much as I should like to do so.

For nearly ten years I have been in a position to observe closely the workings and results of the method, and were I to set forth the most conservative statement of its general merits and educative results, my conclusions would be discredited by many of you and I should be ranked with the enthusiasts.

Now, be it plainly understood, I am not heralding the achievements of any special system. I make my plea for general, objective business training, on grounds too broad to be covered by anybody's special books or appliances. Neither am I here to condemn those who in their teaching require theory and practice to occupy separate areas. Educational discussion, in meetings of this kind, should deal with principles only and should soar far above the dust and din stirred up by the petty bickerings of business and professional rivalry. As a teacher among teachers, I give my experience and testimony that business community training, as I have seen it exemplified, is a revelation of splendid educational achievement. In the hands of its best teachers it is made to include all that is desirable in both the expositive and the intercommunication systems. In both method and exemplification it follows the lines of that great pedagogic awakening of this century, and which has come to be known generically as the New Education.

Business community teaching is to commercial school work what the kindergarten is to primary education, and what the physical laboratory is to scientific training. It rests upon those right maxims of advanced pedagogy, of which the mammoth educational gathering now assembled in this city is the supreme exponent. The plan is today in use in many hundreds of commercial schools, and whatever may be said of special systems for exemplifying it, the method, itself, has seldom or never been abandoned by those who have given it careful and intelligent trial. Its full discussion deserves a larger space than has been accorded it on your programme, for among business educators generally, there is more interest in its practical workings than in all other matters of commercial education. It has occasioned more discussion in business college journals during the past year than have all other subjects put together.

As earnest, honest, fair-minded educators, you are interested in everything that promises to make your work better. If there is a better way of preparing your students for real life than the one laid down in the books you are using, you want to know it. You proudly point to the brave words of the great-minded Garfield, who asserted that the American business college conferred a better life-training than was to be had at either Harvard or Yale. Be worthy of that splendid compliment by neglecting no means of making your work better than ever. Regardless of the sneers of ignorant and disdainful prejudice, be ready at all seasons to follow the admonition of the apostle, "Prove all things and hold fast to that which is good." It is Rousseau who has said, "Truth wears no mask, bows at no human shrine, seeks neither place nor applause; she only asks a hearing."

If you are worthy of your high calling, your brain should offer free and open hospitality to every idea that suggests a means of making more valuable

the practical training you exchange for the hard earned dollars of the enterprising boys and girls who attend your school. That business community teaching augments the value of this training is the testimony of many hundreds of honest and intelligent school men, and you cannot afford to ignore their conclusions.

I plead for a broader field of training and a longer and stronger drill in the practice of the real work of the accountant than that provided by most of our text-books. I distinctly oppose the surrender of the teacher to the arbitrary plans of any book or system. I would have the ideal commercial teacher make himself the master of the situation. I would have him make of his schoolroom a busy beehive, where every commercial appliance, every business transaction, every accredited device of the accountant's art finds actual illustration. I would have every commercial teacher become himself a practical accountant who does not need to be tied to the leading strings of any text-book author, ancient or modern. The teacher should know well his profession and the possibilities of the plastic material that has been given him to form.

Who shall limit the training value of such a school presided over by such a teacher?

There is no need for us to bicker over special books and appliances. Independence, originality and progressiveness are the triumvirate that dominate the work of every good teacher, and to men and women of this type, we may safely leave the fate of all special schoolroom appliances whatsoever, and to teachers of opposite type, not all the appliances or books in the world can bring success.

MR. GEORGE W. BROWN, Jacksonville, Ill.—The gentleman who preceded me did not discuss Mr. Packard's paper, but presented another of his own, which I may ask permission to discuss after a consideration of Mr. Packard's proposition. If it is not true that the purpose of the study of bookkeeping is to make a practical accountant, what is its purpose? If it is not true that the experience and intelligence of the author of a book on the science and art of bookkeeping is of more practical value to the student than his own inner consciousness, then every schoolhouse should be torn down and the teachers publicly punished as defrauding the community.

Mr. Packard's next proposition is to understand the science of accounts one must first understand the unit—an account. If not, why not?

But Mr. Marshall takes the business transaction for the unit. Let us see why not.

Before I knew anything about bookkeeping I knew a good deal about a horse, and hay, and live stock and produce, hired men and sometimes paid them, was transacting business for five years. But I knew nothing about accounts, nothing whatever about bookkeeping, and in a hundred years would not have learned it in that way.

Just so sure as history is a record of past events, just so sure is bookkeeping a record of transactions that have transpired. The historian is not the actor. That would, for the time being, disqualify him to make the record. But he must be in possession of the facts, the all-round facts and their relations to each other.

The bookkeeper ought not to be in the whirl, rush and din, the noise and smoke of business.

Bookkeeping is the science of accounts and the art of recording the dealings of business, and the unit of the science is—an account.

Mr. Levi S. Colton was the first man who devised community teaching, long,

BOOKKEEPING.			
<p>The Science of Accounts, Embracing</p>	<p>1. Financial Accounts.</p>	<p>1. Cash. 2. Personal { Receivable, Payable. 3. Bills Receivable. 4. Bills Payable.</p>	<p>Showing fixed values—or Resources and Liabilities to the business.</p>
	<p>2. Business Accounts.</p>	<p>1. Merchandise. 2. Real Estate. 3. Securities. 4. Machinery. 5. Interest & Disc't. 6. Services. 7. Expense, &c.</p>	<p>Showing the cost and return of commodities or any outlays and incomes produc- ing Gains or Losses to the business.</p>
<p>The Art of Recording the Dealings of Business, Embracing</p>	<p>1. Records.</p>	<p>1. General { Day Book, Cash Book, Journal, Ledger, &c. 2. Special { Sales Book, Cons'g't Ledger, Stock Ledger, Policy Register, &c.</p>	<p>Whereby are illustrated 1. General Principles or Theory, and 2. Business Transactions or Practice.</p> <p>For general and special lines of business and for general and special purposes.</p>
	<p>2. Instruments of Business.</p>	<p>1. General { Bills, Receipts, Notes, Drafts, Checks, Statements, Letters, &c. 2. Special { Leases, Deeds, Mortgages, Insur- ance Policies, Bills of Lading, &c.</p>	<p>Aids in conducting general and special lines of business. Vouchers and original evidences of business transactions.</p>

long ago. H. G. Eastman followed him and carried the idea to such extraordinary lengths and conclusions that the idea "went to seed." That was thirty years ago and we had almost forgotten it, until in a new disguise it appears announcing itself as a new departure in business training.

We are criticised widely for calling small things by large names. These so-called "actual business transactions" are not actual business nor actual transactions, because they involve no exchange of real values. They are simply representative, and have their proper place in a course of instruction.

The chart on the preceding page illustrates the relation between the science of accounts, the art of recording and business practice.

J. M. MEHAN.—My opinion was given in the committee's report on correlation, etc., but I would add, let us not be carried away with glittering generalities. Education is all old. Not all that is said to be new is good, and not all that is old is bad. The account and not the transaction is the basis of bookkeeping. All pupils who enter our schools understand transactions. I wish to be reckoned among those who believe that the less machinery and the more common sense we have in our work the better.

*PRACTICAL WRITING—A COURSE FOR COLLEGES
AND PUBLIC SCHOOLS TO ANSWER THE
NEEDS OF THE PEOPLE.*

BY A. N. PALMER, CEDAR RAPIDS, IOWA.

I have been assigned the duty of outlining for your consideration a course in practical writing.

Practical writing for the people, the masses, if you please. What does it mean?

Treated from this standpoint its trend is only toward the utilitarian. Writing for the masses should be susceptible of the greatest possible speed, but the element of legibility must be one of its component parts.

To be of any value whatever, it must be readable. I do not attach much importance to the element of beauty in treating the subject of writing, as I am asked to do in opening this discussion, but I cannot emphasize too strongly the necessity of neatness, regularity in form, spacing, size and slant; the masses have no use for ornate penmanship; the people do not ask for it, and do not want it.

Ease in execution is of equal importance with legibility and speed; in fact, legibility and speed cannot be developed and long maintained without ease in execution.

Thus we have at the outset, a trinity of elements, no one of which can be ignored with safety, or with any assurance of positive success.

From this standpoint I would define practical writing for the peo-

ple as a style devoid of all superfluous lines; made up of letters that can, to the greatest possible extent, be formed without lifting the pen, or checking the motion; an unshaded style, executed with medium pointed or coarse pen.

In capitals, I have found these styles best adapted to the varied exigencies of business demands, but I would not oppose the use of other styles compatible with the trinity of elements already mentioned. In a word, within certain well-defined boundaries I would not only permit, but would encourage pupils in catering to their individual tastes.

In small letters it is unnecessary that there should be very much of a departure from the script forms we have all been familiar with since Father Spencer's time, but these forms should be smaller than those found in the average copy book. I would recommend the following modifications in the small letters: begin small a, c, d, g and o, at top when these letters are first in words, omit the shades at the tops of d and t and at the bottom of p, and loop the p below base line. As a basis for height I would recommend 1-16 of an inch for one-space letters classed with a, m, n, etc. In this classification the loop letters l, b, k and f, should extend above base four spaces or 4-16 of an inch, and the stem letters t and p, three spaces or 3-16 of an inch.

This style of writing is as large as is usually required in business, and nearly always is more acceptable than a larger style. Those who have become accustomed to writing a large hand experience great difficulty in writing small when occasion demands, but it is comparatively easy to change from a small to a large hand.

While a very open running hand may have its admirers and may meet all requirements in many directions, it must be admitted that a more compact style is more suited to conditions existing in the average business office.

Having decided upon the style of writing most largely in demand and that best adapted to the needs of the people, the problem of how to teach it successfully would naturally present itself, but in this connection I wish to go on record as not opposing any sensible style of writing. There are styles of backhand, or what some term vertical, that I admire very much, but any style of writing for business purposes must be written with a light elastic continuous and rapid movement.

Let me tell you about the copy book, before I attempt to outline a course of study and practice in writing that will meet the needs of the people.

I can complacently and without any feeling of irritation whatever,

say to you candidly and honestly, that I admire very much the beautiful and mechanically perfect script forms of the different copy books. When it can be shown to my satisfaction that there lives a man or woman who, in a busy life, requiring a great deal of rapid writing, has retained and put into daily use copybook writing, I will become the warmest champion the copybook has ever known.

Let me give you two short definitions; one of copybook, and the other of practical writing.

Practical writing is a plain, legible style, written rapidly, easily, and continuously, without fatiguing the writer.

Copybook writing is a padded style, very legible when written with painful slowness, and an almost illegible scrawl when an attempt is made to apply speed. Do you want proof? Do not seek proof at my door. Go to the doctors, lawyers, merchants, mechanics and — bless you, yes — to the teachers. Can you find one among these different classes who has retained the style of writing learned from his copybook? Can you, in fact, find one good business writer who has not sought and found something more practical in chirography than he ever found in his copybook?

I trust my bluntness may be excused. I am told by a formidable committee that I can use only a specified number of words in this paper, and on account of that restriction I find myself unable to cover up my real meaning in labyrinthine or diplomatic terms. Let me then say what I want to, it is this: The copybook method of teaching writing is plainly a failure from a standpoint of utility, and copybooks have only one thing in their favor, and that is their capacity to earn profits for their publishers. But we must not blame the publishers. If our positions were reversed, we would do as they are doing. We, the public, are to blame; we are in the rut and we are too indolent to get out. We know that copybook methods of teaching are not practical, and we know that there are methods that do not admit of failure in this important branch, but we are inert; we are dumb, and while we admit self-evident facts, we take no measures to create a sentiment that will force the issue.

Publishers of school text-books are among our keenest business men. It is not their province to create a public sentiment in any direction, but rather to cater to the demands of the people.

I want to quote to you from a letter I recently received from a prominent gentleman connected with one of the largest educational publishing houses in the country.

I had received a type-written letter from this gentleman, and I noticed that he signed his name in a most admirable style of plain unshaded business writing. I wrote to this gentleman, complimented

his writing, gave him a free dose of my anti-copybook doctrine; invited him to write a letter in his best style for photo-engraving and use in the *Western Penman* to show the difference between the copybook publisher's writing, and the writing in the copybooks.

I received the following in answer:

"I am not unmindful of the compliment conveyed, but as I am situated prefer not to bring myself into such prominence in penmanship matters as the publication of such a letter in *The Western Penman* would mean. I have my own personal ideas about the vertical fad; but the business of publishers is not so much to mold sentiment in one direction or another as to supply whatever may be needed in the way of text-books by the best teachers. It is a little strange that much fault should be found with methods of teaching penmanship heretofore in vogue in this country, since no other country on the globe has produced so many good penmen in all lines of business. You say you know that no one lives who uses any of the copybook styles in actual business and that no one ever learned to write a good hand from the copybooks now on the market. This is true, and you might add that no one will ever learn to write a good business hand from any copybooks possible to be put on the market. I believe that it is true that the Spencerian penmanship (and by that I do not mean absolutely the Spencerian system, but any of the systems approaching or following the Spencerian in style) is capable of laying a foundation for a good business hand that cannot be surpassed. The copybooks used at school present plain and attractive models for the pupil, and whether he becomes a good penman or not depends on himself after he leaves school. His necessities will determine whether he ever becomes a good penman. The telegraph operator, the railroad clerk, the bookkeeper, and others in that line learn young that a good handwriting—one rapid, legible and beautiful—will do much to increase their salaries, and with that incentive the handwriting comes. You know all good penmen do not write the same hand. It would be as difficult for one person to imitate the penmanship of another as to imitate his voice, actions and manner. No set of copybooks, in my opinion, can be made that will uniform the penmanship of the world and cause all men to write alike. Therefore, the good copybook is the one presenting a clear and simple system as a foundation."

In my opinion this gentleman's statements are worthy of consideration because of their inconsistencies. He admits that no one ever learned to write a good business hand from a copybook, and he is frank enough to add that no one ever would, but he would continue the use of copybooks because young men who have abstracted all they can from them have to hustle for a good business hand on the side.

What kind of an educational principle is this that our copybook friend would engraft in our public school system? Why not carry the plan further. Why not apply these inverse methods to spelling, grammar, pronunciation, bookkeeping, arithmetic, and other common branches? If applied to one why not to all?

My copybook friend calls attention to the fact that in this country, where copybooks are in quite general use in the public schools, we have more good penmen than in any other country in the world.

This is true, but not because of copybooks. It is true because it is a habit of Americans to have whatever they may need in their business, and whenever a young man sees a prospect for business advancement through the medium of good writing, he turns his back on the inverse method of teaching writing through the copybook, goes to some teacher who has adopted movement as the only true foundation, takes a few lessons, practices night and day for two or three months, to break up old habits and form new ones, takes his position in the business world, and pushes himself to the front. Now my copybook friend comes complacently to the front again, and tells us that the young man's success is due to what he did not learn from copybooks, and we agree with him fully.

Hundreds of public school workers to whom I have talked have admitted the inadequacy of the copybook to meet the business world's demand for good writing. In fact, I have yet to meet the first public school teacher who has not agreed with me in the matter when I have succeeded in making myself understood. But, they say, our directors cannot afford, or will not hire a special teacher of writing, and we know nothing about practical writing; in fact, no two teachers write alike, and were we to write copies on the blackboard or paper for our pupils the result would be a different style in each grade.

Fellow teachers, did it ever occur to you that the silent but potent condemnation of copybooks is found in this one feature: no two teachers, all having studied along parallel lines, write alike.

All are compelled to abandon copybook penmanship when rapid writing is required.

Practical writing is a simple thing to understand; it is a simple and easy thing to teach. Any earnest, wideawake teacher can learn to teach it successfully in three months under the right instruction.

Take away the copybook crutch, and the rank and file of public school teachers would be teaching practical writing successfully in six months. Do not libel our noble army of teachers by disputing this statement.

There is no longer any doubt on this subject; there are well tried methods of teaching penmanship that compel success, and will not admit of failure from a commercial standpoint.

The copybook is a failure, because it is antagonistic to freedom, rapidity, and ease of execution; because it will not admit of the development of muscular or arm movement, but compels slow movement limited to the fingers holding the pen.

In any successful plan of teaching commercial writing, muscular movement, and its application, must take precedence over any other feature of the work, but form must follow closely and continuously.

The ability to draw neat forms means nothing from a business standpoint; on the other hand, the ability to make a few gyratory motions with the muscular movement is of no value. There must be a fusion of movement and form. Each letter taught must be preceded by a movement drill embodying the form of the letter under treatment.

To illustrate: practice on the traced and spiral ovals should precede drills on capitals O, A, C, D, E, and L, and in each case, the motion of the pen in the air should precede its contact with the paper. This motion in the air means a gain rather than a loss of time when not used excessively. This preparatory motion should not cover a distance exceeding one-fourth of the height of any capital or more than the entire height of a one-space small letter. A quick preparatory motion preceding the form of a letter compels rapidity throughout the form, and results in smooth lines as well as speed in execution.

The teacher who can teach muscular movement, but who cannot teach its application, can never reach great heights as an instructor of business writing. His success must vary with different classes and must ever be below the standard required by the commercial world.

I cannot believe that there should be different styles of writing or different methods of teaching writing in different classes of schools. A style of writing that is adapted to the needs of the business college pupil is, in my opinion, just as well adapted to the needs of public and private institutions of learning of all classes.

While I would recommend for all classes of schools, public and private, a plain, unshaded style of writing, based upon muscular movement, I am ready to admit that there is a time in a child's life when, under the present requirements of nearly all public schools, it seems best to ignore movement, position of hand and pen, and to teach only form, the result being slow and laborious drawing of the forms. I make this recommendation only because pupils are required to do written work in their very early school days, while learning the forms of the letters.

In summing up, I would recommend the following course of study and practice in writing: For business colleges and other institutions of learning drawing to themselves a mature class of pupils, the majority of whom remain but from three to nine months, one hour's drill in each class each school day, supplemented by from thirty minutes to one hour's practice outside of the regular sessions. Rapid muscular movement drills on direct and reverse ovals, drills on sliding, lateral exercises leading up to small m, n, u, o, etc., covering a period of from ten to twenty minutes at the beginning of each writing hour; drills on business capitals separate, and in groups, during the first month in the school, until the forms of the capitals taught have been

fairly fixed in the minds of the pupils, rapid, elastic muscular movement being insisted upon at all times.

During the first six weeks in school, students should be drilled on business figures, miscellaneous figures being made at not less than eighty to the minute, a few minutes drill each day should be given to one or more small letters during the first two months in school, until all the small letters of the alphabet have been treated in this manner. These small letters should be practiced as continuous connected movement drills.

During a three months' course pupils should be taught movement and its application in making all capitals, small letters and figures with some drill on words and sentences in writing. This will give pupils methods of drill, coupled with a knowledge of form, and a foundation upon which a splendid business hand may be built without any further instruction.

In a six months' course frequent reviews should be given during the last three months, and drills on billing and dictation writing. In a six months' course a good style of rapid business writing should be established, and in nine months the student's writing should assume a settled style without further special effort. All this presupposes the earnest co-operation of students.

In public school work, under existing circumstances, I would recommend that during the first two, and possibly three grades, pupils be taught to draw the forms of the letters, but, in my judgment, neither teachers, pupils or parents should be led to believe that this is practical writing. I can see no objection to copybooks in this work, in drawing. Copybooks and drawing go nicely together. I would, however, recommend copies composed of coarser lines than can be found in copybooks now in general use.

There should be no shade and business forms only should be used. After the third year all practice work should be on loose sheets of paper, no smaller than business letter size, and as large as foolscap, if conditions admit. Everything about the student should conduce to the development of free movement. The writing period should consist of not less than fifteen minutes every school day, and during the first year's work one-half of this time should be devoted to constantly repeated muscular drills, the few movements that apply directly to the forms of letters being used. After the first year's work in movement writing, not less than five minutes of each writing period should be devoted to movement drills. During the first two years' work in muscular movement writing, teachers, parents and pupils should fully consider and understand its trend. They should realize that the ability to use free muscular movement advantageously

only comes after thousands of repeated efforts, but that a good style of writing, through the movement method, can be positively assured. Public school workers should look beyond school days, they should anticipate, they should dwell more upon the future of the pupils in this matter of writing, and less upon the satisfaction of seeing accurate work from day to day in early school life.

Muscular movement and its proper application to business forms of letters always guarantees in advance a style of writing that will meet the exigencies of a busy business or professional life. If it is more important that the students in the lower grades of our public schools should make perfect letters than that they should be able to execute rapidly and easily good business writing in later years, then I would recommend the continued use of copybooks in their present general arrangement.

Through the grammar grades and high school the writing drills should be continued because it cannot be expected that public school pupils will fully appreciate the benefits accruing from good business writing until they have reached a period in life where mind takes precedence over mere animal activity. In a word, in public school writing the process of development should be continued until pupils have reached the thoughtful period.

Printed copies embodying in each day's lesson movement drills applicable to the letters being taught are not objectionable, but such copies, as before stated, should be built on practical business lines, and should be detached from the practice paper.

After the first year's work in muscular movement writing, the programme must necessarily be to a great extent a review, a repetition of what has preceded, with new and varied applications.

HIGH GRADE BUSINESS SCHOOLS A PUBLIC DEMAND.

BY MELVIL DEWEY, SECRETARY, UNIVERSITY OF THE STATE OF NEW YORK.

[REPORTED BY MRS. SARA A. SPENCER.]

It is quite the fashion in certain educational circles to sneer at business education. But I recognize the great need of this kind of training and desire to see it brought up to a high standard. Formerly one who desired to become an engineer expected to begin by carrying a chain. If he wished to be a doctor, he must drive the doctor's carriage. If he expected to become a lawyer, he must begin by sweeping out the lawyer's office.

Now we have a hundred different kinds of professional and technical schools. There should be schools of high grade to prepare for

the widest field of all — business. There are some with an extensive course, a competent faculty, and proper equipment. There is a vast number of a poorer sort with cheap devices to catch patronage, and nothing in them that can be called educational, mere “fake schools,” damaging to the better class of commercial schools, an imposition upon the public, and dangerous to the business community. They should be killed off.

One serious mistake made is the use of the word “college” to define commercial schools of any and all grades. It is not warranted by analogy and leads to prejudice on the part of educators in general. The term college belongs properly to schools which prepare for universities. We do not call schools of training for law, medicine or theology, colleges, but schools.

It was wise for the leading business schools of the country to ally themselves with the National Educational Association, to bring themselves into helpful and proper relations with the educational forces of the country.

Educated men and educational men are too much given to sneer at the business college. They need to know what you undertake to do, what you are doing, what are your standards.

There is an urgent need for drawing the line between the genuine and the fraudulent.

Let it begin with an entrance examination. Your schools should take rank with the law and medical schools. New York state has enacted a law establishing a grade of scholarship for those professional schools. After 1900 a student must complete a high school course before entering those schools, and that is none too high a standard for the business college. Then there would be a specific meaning as to the intellectual standing of a business college student. And then a curriculum might be established which should include commercial geography, economics, civics, commercial law, and many other kindred topics.

Give special courses to students who will not or cannot take your full course, and a special certificate for a single branch, as penmanship. But do not give a diploma to a student who has taken less than your full course, which should cover not less than two scholastic years, or their equivalent in previous training and attainment.

By act of the New York state legislature an office has been created known as Certified Public Accountant. The degree C. P. A. would be a proper designation to confer upon your thoroughly equipped graduate.

There should be public inspection of business schools by properly constituted boards or departments of education.

By establishing a standard and maintaining it you will gain the recognition and approval of the educational world which your wide range of necessary, useful, intellectual labor should justly receive.

DISCUSSION.

MRS. SPENCER, of Washington, D. C.—This Department of Business Education is deeply and earnestly engaged upon the discussion of a course of training and a standard of attainment for schools of business, not with the purpose or intention to "kill off" schools that do not choose to adopt it, but to educate the public and to instruct the educational world as to the scope of our work and the ideal toward which we are moving. As instructed by this department the Executive Committee has been for the past year in conference with the Bureau of Education at Washington on this subject, and has had the hearty sympathy, approval and co-operation of the United States Commissioner of Education, who is in direct communication with more than five hundred schools of business, and commercial departments of schools. And this committee has been in correspondence with some fifty representative business colleges, while selecting a Committee of Nine experienced business educators to consider this topic in all its details, and as a whole.

We are now in the midst of this work. Four sub-committees have reported at this meeting. Five more will report one year hence.

We are glad to know of the gentlemen's interest in this subject and we invited him to speak because we wished to hear his criticisms and suggestions.

My objection to the use of the word "college" to describe our schools has a different basis from the one he stated. One does not know whether a college graduate is one of a "picked nine" or "crack four," a "pitcher," a "half back," or an "umpire." The world at large knows very little concerning what graduates of Yale or Harvard or Princeton can do except as to their relative brute force and physical prowess compared with the crew of the Prince of Wales or H. R. H. representative champions. We do know that fifty years ago far-sighted, level-headed men discovered a great gap, an awful deficiency in popular education, and out of their own private resources they founded schools to train young men and women for business; and we do know that the graduates and students of these schools have revolutionized the business of the country. They and their successors have created the wealth that supports colleges and universities where young men spend the flower of their lives, until at middle age they come out very learned and with a great contempt for business.

Yes, it is high time the educational world should recognize and understand the work of the business college, that its curriculum, standard and scope should be an open book that he who runs may read even if he does not follow.

MR. S. S. PACKARD, of New York.—I have been in correspondence with Mr. Dewey on this subject, and have expressed to him my opinion and feelings concerning the points he has here presented, evidently, however, with no success. I have defended our use of the word "college," and have declared my convic-

tion that with the prefix "business," showing its purpose, there is no need of and cannot be any wide misapprehension as to its meaning. My institution, Packard's Business College, generally called "Packard's," misleads nobody, prejudices nobody. I have also explained to him that people in general are no more misled by "fake schools," than they are by quack doctors. Even you, my dear sir, select your physician from your knowledge of his ability and not with reference to his diploma. I am not anxious to "kill off" my neighbor across the way who may have a poor school, and be incompetent. The community will measure and judge him and he will find his level. No law that can be enacted will draw the line so well as practical results.

DEPARTMENT OF CHILD STUDY.

SECRETARY'S MINUTES.

FIRST DAY.—THURSDAY, JULY 9TH.

The meeting was called to order at 2:30 p.m. by the President, Professor Earl Barnes, of Leland Stanford Jr. University, California.

In the absence of the Secretary, Dr. Edward R. Shaw, Professor Charles B. Bliss, of the New York School of Pedagogy, was appointed temporary Secretary.

The following papers were then read. Owing to the large attendance the programme was repeated in an adjoining room:

1. Child Study up to Date: By Miss Sara E. Wiltse, West Roxbury, Mass.
2. Work of the Illinois Society for Child Study: By Francis W. Parker, Principal of Chicago Normal School, Ill.
3. Work of the Minnesota Child Study Association: By Professor L. H. Galbreath, State Normal School, Winona, Minn.
4. Child Study in the Tompkins Observation School: By Professor Elmer E. Brown, University of California.
5. Scientific and Non Scientific Method of Child Study: By Professor Wm. L. Bryan, University of Indiana.
6. Child Study a Part of the Teachers' Art: By Professor C. C. Van Liew, State Normal School, Normal, Ill.

Upon motion of Professor L. H. Galbreath, the President was directed to call a meeting of those interested in the various child-study organizations with a view to the formation of a national organization. The President called the meeting for Friday, July 10th, at 5 p. m. At this meeting a committee of three, with Professor William L. Bryan as chairman, was appointed to prepare plans for a national organization and report to the child-study section next year.

The President appointed as Committee upon Nominations, Herman T. Lukens, Miss N. Cropsy, G. W. Luckey, Charles B. Bliss, Secretary *pro tem*.

The meeting adjourned to the following day

SECOND DAY.—FRIDAY, JULY 10TH.

The meeting was called to order at 2:30.

The following papers were read:

1. Methods and Results of Child Study Work at Clark University: By Dr. G. Stanley Hall, Clark University, Worcester, Mass.
2. What Children Want to Do When They are Men and Women: By Professor C. H. Thurber, Department of Pedagogy, University of Chicago.
3. Relations of Child Study to the Work of a City Superintendent: By C. B. Gilbert, Superintendent of Schools, St. Paul, Minn.
4. Interests in Childhood: By Professor M. V. O'Shea, School of Pedagogy, Buffalo, N. Y.
5. The Result of Child Study in Country Schools: By Anna K. Eggleston, Buffalo, N. Y.
6. Some Musical Phases of Child Study: By Miss Florence Marsh, Detroit, Mich.

The Committee upon Nominations presented the following report on officers for the ensuing year:

President—Colonel F. W. Parker, Principal of Chicago Normal School.

Vice President—H. E. Kratz, Superintendent of Schools, Sioux City, Iowa.

Secretary—Margaret Schallenberger, Instructor in Education, Leland Stanford Jr. University.

The report was adopted and meeting adjourned.

CHARLES B. BLISS, *Secretary pro tem*.

PAPERS AND DISCUSSIONS.

CHILD STUDY UP TO DATE.

BY MISS SARA E. WILTSE, WEST ROXBURY, MASS.

In preparing this sketch of progress made in child study since the meeting of the association in Denver last summer, I purposely omit here any report of the work done in those states represented by the gentlemen whose names on the programme promise full justice to the fields from which they come.

On the list of states mentioned in the Preliminary Sketch of the History of Child Study in America, published in the *Pedagogical Seminary* last summer, I find New Jersey the first without representation on your programme. In this state Trenton Normal School and Miss Lillie Williams still make the center of activity. Miss Williams may be more profitably quoted than reported. She writes: "We have followed our modified form of Principal Russell's plan. Each pupil keeps a book in which she records her observations on children. By the end of the year each student has collected several hundred observations classified according to Mr. Russell's blanks. My idea is to continue individual study during the school career of these children, thus in time having a life book of each that ought to be of incalculable value to any teacher under whose instruction they come. My pupils have made tests for color blindness and other eye defects as well as tests of power with other senses. Several child vocabularies have been collected and some investigations made concerning the time of day that pupils work best. Five thousand reports have been sent to President Hall upon his syllabi. I feel that the students have been led to an interest in, and love of children, and have acquired a habit of observing them which will last through life, as well as having formed an abiding interest in genetic psychology. I have spoken seven times in different parts of the state, and always to deeply interested auditors.

J. Mark Baldwin, of Princeton, has a paper on Child Study Applied to Education which is undoubtedly based upon his own studies, he having sent out a syllabus through the same medium which publishes his article, viz., Transactions of the Illinois Society for Child Study.

Michigan has begun child study in a business-like way with the

immediate sympathy and co-operation of Mr. Pattengill, the superintendent of public instruction, who writes the introduction to the first manual of child study sent out by the department of public instruction of that state. Miss Marsh, of Detroit, has a mother's club which meets at the school house fortnightly to discuss food, study hours, discipline and allied topics with the teachers; this feature of the work in Detroit is of more than local interest, for Superintendent Pattengill reports that this conference of teachers and parents has healed an aggravated case of sectarian animosity in that city. The various syllabi used by the Michigan association are printed in the Manual of the association.

In Wisconsin all the work reported is based upon a syllabus issued by James F. Morse of the Wisconsin University,—Mr. Morse working under the direction of Professor Jastrow. This syllabus covers a number of studies in the moral development of children and the relation of children to authority.

In Rhode Island, the Barnard Club School of Child Study centers the work in Providence, although there are seventeen Round Tables scattered throughout the state. Mrs. Barus, so well known in connection with the Woman's Anthropological Society, has furnished the club with suggestions for the study of infants. The four neat syllabi furnished in compact pamphlet form by this society might well be used as a model by other societies. Mr. Gilman C. Fisher, superintendent of schools in Pawtucket, is the secretary of this club. One of these syllabi gives suggestions for the study of children in kindergarten and first school year, another from second to sixth year, and the last for study of children of grammar school age.

Colorado has a child study section connected with its State Teachers' Association which has issued a syllabus for testing conditions of mathematical work. The hints to teachers on the first page of their first syllabus should be incorporated in the ten commandments so much needed at this stage of our exodus from the pedagogical Egypt. The last report sent out by the superintendent of public instruction in Iowa shows that the Iowa Society for Child Study has followed its first outline of work and has proven the need of eye and ear tests for every child in her public schools. Alas, that we cannot as easily test and prove the public ear, and find a trumpet that will reach it! I do not forget reading a paper before this association ten years ago, giving the same results of tests of hearing in the public schools of Boston, but Boston took no heed of the alarming facts except in one school, whose teachers today probably do not remember that such investigation was made.

Superintendent Kratz has directed a study of the characteristics

of the best teacher as recognized by children, the report and results of which are published in the current number of the *Pedagogical Seminary*. The sixth study is one of children's preferences, and Mr. Kratz seems depressed by the wail of dissatisfaction from girls who universally hate dishwashing, and he seems to think it bodes ill for the future home. To me it seems no more prophetic than the disposition of boys to slight their toilets and to neglect their boots. Further study will show all these aversions to be temporary. For myself I remember that phase of my life very well and the surprise I experienced when my mother told me I would learn to like it by doing it well, and that she hated it once herself as most girls did, but it was like the measles and must be endured. To look at it as a phase of girl life as sure to pass as the fashion of my dress, was a direct help to me, and I am sure study of children will make us, and them, more hopeful and courageous instead of despondent. Dr. G. T. W. Patrick, of the State University of Iowa, has one of the best equipped psychological laboratories in the West. In this university many tests, both physical and mental, have been made upon children between the ages of six and twenty-one years, the nature and results of which will be published as soon as they are completed. Three hours a week are devoted to lectures on child study and related subjects.

The University of Pennsylvania offers a course in experimental child psychology. A summer school of the university shows the usual time devoted to this topic, although Dr. Witmer does not allow the subject to be mentioned by any dilettante, undignified term and when we enter Philadelphia we must leave our modest child study outside and apply ourselves to child psychology.

Miss Mackenzie, superintendent of kindergartens in Philadelphia, has made returns on the kindergarten syllabus issued by the International Kindergarten Union. Miss Marot reports a "Mother-Play" class which makes an attempt to fit the songs and games of Froebel to the needs of the children, as observed by mothers and kindergartners engaged in study of the children actually under their observation from day to day. Miss Marot uses questions selected from Mr. Barnes', Mr. Starbuck's, Mr. Russell's and President Hall's syllabi, adding such of her own as seem required.

Mr. Allen, of the Institute for the Blind, is experimenting in physical psychology upon blind children in Philadelphia.

Superintendent Thomas Scott Loudon, of Greenville, has a thesis on the "First Half Year of an Infant's Life," which is perhaps of more importance to Americans than either Preyer's or Perez' notes because of the influence of heredity and different environment. This thesis touches upon movements, seeing, hearing, attention, emotions

of joy, sorrow, anger, and the will as indicated in the first month. It is a pity not to give so valuable a contribution to the literature of child study some more permanent form than the pamphlet in which it appears.

It is a good omen that, in Connecticut, Miss Hunt is studying so-called dull children, and that out of 700 teachers even forty have responded to her appeal for such study. When we succeed in any state or city in getting the rights of this class of children recognized by school boards and proper provisions made for their instruction, we may cry with the patriarch of old: "Now lettest Thou thy servant depart in peace." These forty teachers ought to be enrolled upon a national scroll of honor.

At Farmington, Maine, records have been kept of the work of children, many of which are accompanied by photographs. Reports on several of President Hall's syllabi have been sent by Miss Swift, who says they have given her an insight into the natures of individuals never before understood, and have afforded a revelation of pupils that could have been obtained in no other way.

The *North Western Journal of Education* has a child study department conducted by G. W. A. Luckey, of the University of Nebraska. This journal is edited by J. H. Miller, and published in Lincoln. The July number is devoted entirely to child study; the editing of this number being given entirely to Dr. H. K. Wolfe, who gives some reports of his own investigations. Mr. Luckey has published in the *American Journal of Psychology* an article on "Comparative Observations of the Indirect Color Range of Children, Adults, and Adults Trained in Color;" this is intended only as preliminary to a series of articles for which Mr. Luckey has the data, but has not had time to present to his fellow students. The Nebraska Society for Child Study was organized in January, 1896, with a membership of seventy-four, which increased in less than six months to 112. The society justly prides itself on the fact that one hundred teachers in the state are subscribers to the *Illinois Child Study Monthly*. The University of Nebraska held a summer school in June with a department of pedagogy, the first course of which was devoted to child study.

Mr. Aikins, of Cleveland, Ohio, has been making ethical studies in the public schools, and although his returns are not fully worked up, he draws the conclusion that except with a few of the youngest children the Ten Commandments have no place in their ethical life, and that as children advance in years the morals of obedience and conventional observances give place to ideals of active self-assertion for humanity. Sympathy and kindness come much earlier than retribution and justice.

These early conclusions and sweeping deductions are part of the dangers that beset every student, especially in the domain of ethics. If such men as Sir Francis Galton fail to apply rigid scientific methods to their investigations in ethics among adults, how careful should we be in this more delicate task of studying little children whose minds are more in that divine flux, of which Heracleitus writes, than are the minds of men. The danger of misapprehension of the deepest and most sacred feelings is one against which we need to guard ourselves every hour.

The great congress held in Chicago this spring will be reported by Colonel Parker, and I will therefore touch upon it only in summing up the general results of child study. Perhaps that which appeals most directly to the popular mind is the discovery of the physical wrong done so many children who are afflicted with defective sight and hearing, but in such a mild form that it has passed unnoticed even by the parents, who never understood why their children were so backward at school. It is agreed by all students of child life that henceforth children should be seated in a school according to the perfection or imperfection of sight and hearing. Methods of reading and writing are already modified in some schools and the teaching of these must conform to what is already known.

Less suppression of spontaneous movements is practiced since it is proven that such movements are absolutely necessary to every normal child.

Abandonment of much of the fine work in kindergarten is due to the experts who are more Froebelian than we ourselves, for I am ashamed that some of us today are prone to begin with Froebel who would have the children the first consideration.

Conditions of fatigue are better understood and study hours are more carefully arranged to fit the mental conditions.

Drawing will surely have a larger share of the time in the first years of school life in accordance with the newly discovered interests of children who have so long taken their natural rights surreptitiously, as many an old schoolbook testifies.

Child study has called attention to the individual child as nothing else could have done, and has put an effectual bar in the way of much of the old-time mass teaching. I cannot refrain from pointing another moral for kindergartners who find it so difficult to keep the kindergarten unharmed by primary methods, especially where kindergartens have been made part of the public school system. Some of us have crossed the threshold of Bluebeard's chamber of death, but those who flee to the tower may descry our armed brothers coming to the rescue. To us child study in the universities is our promised sal-

vation from grade pressure and mass teaching. This danger is one of the most insidious foes with which we have ever had to contend. The adoption of the kindergartens by public school boards always puts them in the machine, and while these same boards appreciate the inherent value of individual work of kindergarten as contrasted with other grades, it is next to impossible to stem the old and deep current of grade pressure which demands a certain amount of measurable acquirement from every child that passes from kindergarten to primary school. Where is the kindergartner who does not feel that her graduating class must be crammed just a little in number, and nature, and language preparatory to the work of the next school year? I know that this little class plays school and rivals the efforts of other freshmen in hot June days when the soul of the kindergartner should stand at the gate of the children's paradise with a sword of flame, forbidding entrance to that sacred place to every semblance of examinations or tests of knowledge for future standing in school. Again we must appeal to the universities to save the little children from this Moloch of grade work. Kindergartners alone cannot conquer the difficulties. Spend a day in any public kindergarten near the close of the year and you will see the need of defense of the children's rights by the experts who speak with authority about brains and nerves.

During the past year two marked tendencies have grown distinct. One represented by the Illinois Society and by Mr. Earl Barnes to study those things immediately serviceable in the schoolroom, or child study from the standpoint of a practical pedagogy. This has prompted the Illinois Society to seek a consensus of results. It has enabled Mr. Barnes to work with the co-operation of teachers, and has prompted elsewhere the patronage of state and city boards. Many of these results are now working like leaven in some of the deepest questions of curriculum making.

Another tendency is the scientific, represented by the Herbart Club, and by President Hall, which cultivates child study for the sake of psychology rather than for pedagogy, and already hints of radical changes in our views of the soul; is anxious to move slowly in the formulation of results, believing that we are on the threshold of a great scientific revolution that will effect radical changes in most text-books of psychology.

Those engaged in child study have their choice between the following methods: Lowest and most rudimentary of all, and most obsolete, is the blanket syllabus method of Professor Sully, who asks all persons to observe and record all things of all children; next is the method of Mr. Russell, which lays stress upon individual cases with no syllabus,

and simply presents them classified and numbered for the use of experts. This is one of the most fascinating of all methods, but we may ask if it does not tend to lay stress upon what is exceptional and striking so that its very interest suggests its limitations.

3. Is the study of an individual child—the life book, Preyer and Shinn methods; this has the peculiar merit of individual psychology that is appearing in so many fields, that focuses attention upon a criminal, a lunatic, or a defective.

4. The method of individual topic as represented by Royce, Baldwin, Russell, Small, and by President Hall's thirty-two syllabi, each devoted to some one topic, as anger, fear, dolls, etc. This method seeks by statistical and other means to present the largest composite photograph of the development of a single instinct from its first appearance in babyhood up to maturity, showing all its manifestations in their proportion and sequence.

This year has not only witnessed the development of these tendencies, but a deepening of interest and scope of child study. Those who thought it a fad are beginning to undertake it, usually taking the border land of physical tests for their maiden efforts. The second Herbartian Year Book shows how all views of interest, culture stages, correlation and groups are coming to look upon child study as the ultimate appeal to settle all the growing differences of opinion, and to give us eventually a psychological, as distinct from a logical curriculum.

If the natural basis of all progress is the healthy action and reaction between two tendencies or parties,—the one conservative which takes care that no good thing of the past is lost; the other progressive and protestant, that foresees and forever seeks to reform by an appeal to human nature and human needs,—then that natural issue is today plainly and squarely before the teachers of this country.

Finally, the chief issue in the pedagogical world of today is between those who desire to group the culture material of the past into logical unities as the basis of courses, and those who make child nature, its needs and interests, the sole test. Most important of all, however, is the new life which teachers in all grades testify to having received from the more natural and sympathetic relation brought about between teachers and children and between parents and teachers.

It is like the reformation in Luther's time, and not a little child in all the land will be so much benefitted by it as the teachers themselves if they will brush the cobwebs from their eyes and unstop their ears to listen once more to the old story of a well of life from which they who drink shall never thirst again; for there is nothing in all the world so interesting, so mysterious, and so well worth enthusiastic devotion and study as the first little child you may meet on going from this room.

WORK OF THE ILLINOIS SOCIETY FOR CHILD STUDY.

BY FRANCIS W. PARKER, PRINCIPAL OF CHICAGO NORMAL SCHOOL.

[PRINTED FROM NOTES TAKEN BY THE SECRETARY.]

The State of Illinois is in a very healthy condition. We have a body of teachers who are willing to study, and who are enthusiastic in their work. The Illinois Society for Child Study has been organized two years. We have four sections of the association. Northern Illinois has two; Central Illinois one, and Southern Illinois one. So far as possible our first aim is to reach the teachers. We have in the county institutes and in all the teachers' meetings some phase of child study presented. We aim to reach every teacher through the meetings and through the conventions.

The next aim is to reach the people, to get the mothers and fathers to study the children. For this purpose we have Round Tables. We allow teachers to come into these meetings, but the fathers and mothers are expected to form the principal body of workers. Five persons may form a Round Table, and get a charter from our society. As yet we have carried out one plan only; that is, we have a large body of lecturers associated with the society who shall be ready to give lectures in various centres in connection with the work of the Round Tables. It is proposed that each member of the Round Table shall have some particular problem, and make a report upon the same during the year. The main thing is to get the parents interested. The deficiencies of our present system are evident. We know that a large part of our teaching is not effective. There are many difficulties in the way of improvement. So many of our leaders do not want a change, because no doubt they were so well educated themselves. To be sure the women are taking up the cause vigorously but perhaps some of you have found that the presence of the woman is not always a guarantee of success.

We have held three congresses. The last one was held in Chicago. Three meetings were held during this congress. Great enthusiasm was manifested. Some of the best scientists in the country were present and read papers. Dr. G. Stanley Hall, the father of child study, gave three lectures. Experiments were going on all the time under the direction of Drs. Jastrow and Krohn. The University of Chicago furnished means for making tests upon children. This congress brought the universities, the kindergartens, the secondary schools together in one movement. This was one of the most profitable fea-

tures of the meetings. Another helpful feature was the presentation of reports from all over the country. Professor O'Shea, from New York, Professor Thurber, now of Chicago, Professor Galbreath, from Minnesota, and others presented reports of the work in their several states. Reports were also presented from the Round Tables. The results of the experience and efforts from these various sources poured into this centre.

The movement has been strong in our state, but we do not confine our work to Illinois. Members have been received into our association from all parts of the United States, and from other countries—some from South Africa. Any one who will send to the secretary, C. C. VanLiew, at Normal, Ill., will receive directions for becoming a member. The members will receive at once four publications. One of these books comprises the work of eminent scientists. I made a request of one man that he should present us the results of his work in this direction. He said, "We are not ready to give results. The Philistines are continually calling for results." I said, "A dying world is calling for results." At every step there must be something better. We need all the results for immediate use.

Some have expressed a fear that there is danger in putting this new subject into the hands of teachers. I am not certain about this. Certainly each teacher has but one problem, to know each child perfectly, in body, mind and soul. Certainly that is an infinite task. Certainly hundreds of years must elapse before it is accomplished. Each one must know each child as perfectly as possible. Today we have courses of study fixed by our boards. Certain things must be done. The change to be sought is that each teacher be induced to study the child. This study of children all over the world must furnish something towards this end.

Now what have we done? First: we have studied marked defects in children. It is consoling that we are all of us somewhat defective. That is only a new way of stating the old doctrine of original sin. But our work has had to do with marked defects of children. We first turned our attention to the dull children, to those who are the victims of constant nagging in the schools. I believe that nagging is worse than corporal punishment. We have discovered that dull children almost always suffer from some physical defects. A certain principal, a good man, had the following experience with one of his boys. This boy was a dull, hopeless case. No one could tell the cause of his dullness. He was taken to a physician without the knowledge of the teacher. The teacher was surprised at the sudden development of the child. His difficulty was found to be due to a physical defect, not to original sin in the old sense. Now, instead of becoming angry at

such children, we are looking them in the face and saying what can we do with this child?

As a result of this child-study movement there has been steadily and surely a great gain for the better. Reports of these things are coming to us slowly from all states. What does this movement mean? It is a movement from artisan teaching to artistic teaching. From the salvation of a few children to the salvation of all. We, in the past, have used few means. If we study the children from all sides and apply all the means, we shall reach greater results. Science, too, is coming to our aid. I sometimes criticise scientists. Certainly they can never find out the child as we learn to know him by our daily contact. But we nevertheless welcome all the aid that they bring.

MINNESOTA CHILD STUDY ASSOCIATION.

BY PROFESSOR L. H. GALBREATH, STATE NORMAL SCHOOL, WINONA, MINN.

The Minnesota society was organized this year at the holiday meeting of the State Teachers' Educational Association. Being young it has done but little. A few things, however, of some interest can be reported. The association aims primarily to promote those lines of interest and investigation that relate closely to the practical demands of education, and, secondarily, to assist specialists in their scientific and theoretic researches. By the organization it was hoped that much could be done in collecting, analyzing, and systematizing common, everyday experiences that would be of assistance to all parents and teachers; it was believed that this form of work would help pave the way for other studies better suited to scientific purposes; it was also maintained that an important function of the society should be, not merely to assist and encourage the specialist in his studies, but to prepare the public mind for his conclusions and to aid in the publication of those found to be of educational importance; it was decided, therefore, to organize in a broad way with the aim of interesting parents and teachers. It was also recognized that the reflex influence and cultural value of child study upon the teacher is worthy of no little attention. Probably the most important work planned consists in the endeavor to awaken a warmer personal interest in children, and to stimulate and direct its members toward a more scientific spirit and method in studying them individually. The words of one of our leaders best express the guiding idea of our association: "Child study is primarily for the teacher (observer); secondarily for the children, and incidentally for science."

This society is not, therefore, a scientific association. It does not discourage such work, but rather proposes to co-operate with specialists—yet to avoid the very appearance of a pseudo-scientific organization. There are only a few specialists, at present, among its members. The enrollment consists mainly of teachers and supervisors of elementary schools. These have joined for various reasons, but the motive that obtains with most members, I believe, is the desire to become keener, more accurate and fruitful observers of children. They wish to become student teachers. Besides teaching they must study to find the factors that have influenced and are influencing their pupils, and to learn how they can counteract in one case, and co-operate most effectively in another. Teachers should be in a very real and important sense original investigators. Efficient teaching involves the discovery of the child. The immediate aims of instruction and training, the values of means, and the application of method demand knowledge of the child who is taught; their particular form and content should be derived from a full and faithful comprehension of the child's particular mental possessions and powers. To know one child thus thoroughly involves little less of genius than to know about children *en masse*; and to develop a child properly demands no less sagacity than to develop a law of science. We, as teachers, should become interested naturalists; should become abler observers of real, living, acting children. In Minnesota it is not aimed by the society to do anything in particular that is entirely new. It is recognized that all good teachers and parents in all time have studied their pupils; they have always observed them and made inferences; it will be the function of the association to assist toward making wiser and more careful observations, and in deducing wiser and more scholarly inferences. As Superintendent S. S. Parr, President of the association, puts it: "The new movement proposes to introduce a very important element, not previously present in a recognized form, viz.—the systematic and conscious carrying forward of what has heretofore been done in an unsystematic, *naïve*, and unconscious way." The members of this society are bound together by a common conscious purpose of self-culture and neighborly assistance.

The plan of the organization provides for general directive and advisory boards, and corresponding secretaries, whose duty it is to organize and conduct work, according to the spirit and plan of the state society, in localities where proper interest can be awakened. The general officers elected by the association are a president, a secretary and treasurer, and three directors. These constitute the executive board. The advisory board is appointed from specialists whose field of study and activity might make them interested and helpful partici-

pants in and contributors to the general work. Three vice presidents are appointed and delegated to look after the work in certain divisions of the state, and corresponding secretaries to care for the work in local centers. Anybody who is in sympathy with child life and the study of children is eligible to membership. There are now enrolled upon the membership list about 150, paying an annual fee of fifty cents.

Most of our members are strangers to systematic study of children, and need, therefore, to be introduced into the spirit and method of this somewhat new subject and form of study. To accomplish this they should read literature on the study of children and concerning child life, as well as undertake to study children directly. The executive committee consequently attempt to stimulate reading of such literature, and have sent out syllabi for this purpose. Beginning work that is planned to engage the attention of the masses should emphasize the practical. Work, however important to science, which shows no immediate results of practical value will not long commend itself to busy parents and hard-worked teachers. They will be loyal to child study as long as they have faith that it can help them in their work. Their loyalty exists for the child primarily, for science secondarily.

To give direction in the study of children and in reading, a number of syllabi on the following topics were sent out: *The Eyes of School Children and their Defects*; *The Use of Stories*; *The Child, a Volume to be Read*; *Plan and Method in the Study of Children*; *A Study of Children's Readings*; *Unnoticed Educative Influences*; *Movements of Children*; *A Study of Memory*; *Unexpected and Incorrect Answers of Children*; *Unexpected and Irrelevant Questions of Children*. Besides the many numerous and important references in the syllabi, the executive committee, to aid and encourage reading, has sent out a brief but very carefully selected bibliography on child study. In planning this work, it was felt that freedom to study children with interest and inspiration, with profit and practical results, the ordinary teacher must become informed not merely in knowledge and method, but in spirit and attitude. Through the kindness and courtesy of leaders in the states of Michigan, Iowa, and New York, our committee has been permitted to send out some very helpful matter in pamphlets and reports, published to give direction to the work in their own states. In behalf of the committee whom I have the honor to represent in this report, I wish to acknowledge the indebtedness of Minnesota to these sister states, and to take this opportunity to say that the time now seems to be fully come when a federation of state societies would greatly increase the efficiency of this remarkable move-

ment and devotion to the study of children in America. For economy of effort and expenditure for publications, and for co-operation in study, such a united organization is greatly needed. That informal steps have already been taken to bring about this desirable result is a matter for congratulation.

To find out the present *status* of the work in Minnesota, and to see what could be secured in the way of concrete data, from the practical teacher, bearing upon the value of child study for his daily work, the following outline of suggestive points was sent out:

1. (a) How long has the study of children, as we understand it, been of interest to you, and what awakened this interest? What factors have led to any change of interest which you may have experienced? To children of what age has your attention been directed? In answering these questions it would be helpful to us if you would name any printed matter, articles, chapters, magazines or books that have been of peculiar stimulus to your interests, and of signal help to you.

(b) Why do you believe in the study of children or why do you not believe in it? (Please answer from personal experience rather than from theoretical reasons.)

(c) What particular phase of study have you found of most interest and what of least? Why?

(d) How has your method of studying children been affected by the new movement and emphasis on child study?

2. (a) If you have pursued recently any special study of children, will you state briefly what your particular objects of study were and by whom they were suggested. How was it carried on and with what results?

(b) What data or conclusions have you, if any, which you could send to the board for analysis and classification?

(c) What defective or exceptional children have you discovered through special study illustrating (1) deficiencies of sense, (2) incomplete and insufficient action of bodily parts, or (3) a lack of vitality and health, which hinders regular work. How did you find them, and what did your discovery lead you to do?

(d) If not described under "c" will you please describe here any devices to test the perception, memory, judgment, feelings or will-power, that you have employed and deem important?

(e) Have you used any special devices or followed any important rule or practice in examining the contents of children's minds, either before or after instruction?

(f) Have you studied the effects of your schoolroom on the respiration, heart action, digestion, muscular vigor, weight or alertness of pupils? If so, what have you found?

(g) If you have attempted to pursue studies outlined by another, with what peculiar difficulties did you meet?

3. (a) What do you desire most from child study and from the State Child Study Association?

(b) What lines of work can be carried on best in local centers?

(c) What helpful suggestions have you to offer as aid to the general work of the state?

In this effort we did not succeed in collecting much of importance. Teachers are too busy, or else feel too little the importance of such a demand to give it the required attention. However, the responses were helpful in a number of reports. Perhaps for this report one or two selections from the answers will indicate some what their value. One school superintendent who is a successful worker in child study says that the writings of William Hawley Smith have helped him greatly. The following answer from a county superintendent is stimulating and suggestive. I have found several children with weak eyes and weak stomachs, mothers similarly afflicted, and have been led to "urge the use of glasses and better food for children, better cooked, simpler and more nutritious." From one school the following summary of a study on the eyes of some 125 children was given. About 70 per cent were found defective in some respect, and 15 per cent had been referred to an oculist. By this test the teachers had become more interested, and greater care in seating, in assigning work, in use of blackboard and in lighting the room had been shown. Parents had been informed and advised. Defective children in some cases have been given less work and more time for play and out-of-door exercise. The report goes on to say that all school children should be examined. Testing is necessary; observation, however careful, is inadequate.

A number of persons are carrying on studies of special problems. Among them are Dr. D. L. Kiehle and Professor Harlow Gale of the State University; Principal Hiram Slack and Dr. H. S. Baker, of St. Paul; Miss Emily Harris and Professor E. A. Kirkpatrick, of Winona State Normal; Miss Isabel Lawrence, of St. Cloud Normal; and Dr. Stuart H. Rowe, of Mankato State Normal. Reports on some of these studies will be made at the child study congress to be held the last week in August at the State University.

CHILD STUDY IN THE TOMPKINS OBSERVATION SCHOOL. I.

BY PROFESSOR ELMER E. BROWN, UNIVERSITY OF CALIFORNIA.

The Tompkins School is one of the ordinary ward or grammar schools of the city of Oakland, California. At the beginning of the year 1895, on the suggestion of the city superintendent of schools, this school was placed under the supervision of the department of pedagogy of the University of California. The department was empowered to make any necessary changes in the course of study and methods of instruction, to select teachers from those already

employed in the Oakland schools, and to use the school in general as a field of observation in connection with the pedagogical work of the university. A kindergarten was added to the school. Otherwise it has continued to be conducted as an ordinary ward school. About 450 pupils of both sexes are enrolled annually, and a principal and twelve teachers are employed.

When the department of pedagogy assumed the oversight of the school, the responsibility was roughly divided between Assistant Professor Thomas P. Bailey, Jr., and myself. The direction of the child study undertaken in the school, with the exception of the physical measurements, fell to Dr. Bailey, and the more general direction remained with me. Lines of work have been taken up in the school, aside from regular child study, which we have found to be full of interest; but I will pass them over at this time, as not related to the subject in hand.

The children have gone through two kinds of physical examination. They have been examined by a competent specialist with reference to the condition of eyes, ears, nose, and throat; and they have been measured and tested by the director of physical culture in the university of California.

The results of the first of these examinations are of practical rather than theoretical value. They have resulted in increased attention to the proper adjustment of light in the schoolroom and in especial care of those whose eyes have been found to be defective; and have led to a more intelligent treatment of individual pupils who had seemed either stupid or obstinate because of an unsuspected defect of hearing. When children have been found to require medical attention in any of these particulars, their parents have been notified.

The measurements which have been taken are those of height, weight, girth of head, and lung capacity. The results of these measurements have been tabulated for purposes of comparison. We lay no stress, however, on the theoretical results of a single measurement of so small a number of children. We look, instead, for results of value from frequent measurements of the same children, extended over a term of years. The immediate practical outcome of these measurements has been to call attention to the low average lung capacity of the children. We are attempting to remedy this defect in some measure by increased attention to the ventilation of the school-rooms and by special breathing exercises.

I regret the inability of Dr. Bailey to be present at this meeting and give in person an account of the studies of children which he has conducted in the school. I will hand to the secretary a sketch of his

work which Dr. Bailey has prepared, and ask that it be published in the minutes of the meeting. Briefly stated, the decided excellence and suggestiveness of Dr. Bailey's work seems to me to depend upon the following conditions: 1. That the teachers' notes have been taken, and later have been co-ordinated under the stimulus of Dr. Bailey's personal direction. The notes have been carefully canvassed and discussed in weekly teachers' meetings. The teachers have, moreover, attended some of the pedagogical courses at the university, and so have gone about their work with a steadily broadening view of its bearing on general educational theory.

2. That these studies have proceeded from a general, sympathetic understanding of individual children to a more particular examination of particular traits and powers, instead of endeavoring to construct a general view from a combination of the results of special investigations. The studies begin, in Dr. Bailey's happy expression, with the "whole child."

3. The scheme of classification which has been worked out in the course of these studies is based upon biological conceptions. Dispensing, as far as possible, with the mechanical terminology in more general use, it arranges phenomena in convenient categories without separating them in thought from their vital connection with the whole organism.

I would call especial attention to this scheme of classification and to the canons of empirical child study which accompany it; and would earnestly request those who are engaged in similar studies to give us the benefit of their criticism of both. What is here presented is an essay looking toward a workable and useful scheme. It is still plastic; and Dr. Bailey has presented it in this form chiefly for the purpose of calling out helpful criticism and suggestion.

CHILD STUDY IN THE TOMPKINS OBSERVATION SCHOOL. II.

BY PROFESSOR THOMAS P. BAILEY, JR., DEPARTMENT OF PEDAGOGY,
UNIVERSITY OF CALIFORNIA.

In this brief sketch I purpose giving some account of the work in child study done at the Tompkins Grammar School, Oakland, California, during the time in which that school has been connected with the Department of Pedagogy in the University of California—January, 1895, to June, 1896. As the writer had these studies in charge, and as they were a continuation of his work in South Carolina, he takes the liberty of referring to child study as carried on in that state.

IN SOUTH CAROLINA.

In Marion, South Carolina, from January to June, 1894, we worked in this wise: The teachers took a few notes each week on interesting school incidents, especially those connected with spontaneous doings and sayings of the children; these notes were turned over to the superintendent (the writer), who studied them carefully, comparing them one with another, and made them the text for discussion of various points of character-study, methods, discipline, etc. In this way, many other "notes" came out—the various school-members of a family were compared, the effects of one method, in teaching or in discipline, on several children and of several methods on one child were studied; the pedagogical history of troublesome cases was reviewed; diagnosis, prognosis, treatment, etc., were agreed upon tentatively. Sometimes the whole hour of the weekly teachers' meeting was spent on one teacher's notes, sometimes on a comparison of similar cases from all the teachers, etc. There was ample discussion. The conclusions were all provisional, and had for their chief effect the stimulation to observation of a more careful kind.

Some of the effects observed: Professor Burnham's opinion was justified, namely, that child study is "primarily for the teacher, secondarily for the children, incidentally for science." We found that with untrained teachers the attempt to play at "science," even incidentally, was dangerous. We found that the teachers' interest in the children was stimulated; that their sympathy was thereby increased; that methods tended to connect themselves with careful observation of their character effects on the children; that unity of feeling in the teaching force was helped on; that the work steadily gravitated toward the special study of certain interesting children.

During the next year (1894-'5), Mr. Thomas B. Hamby, principal of the white school, continued the work along this line by himself and under very unfavorable conditions. In the same year the writer tried to develop his plan of work at the Tompkins School. For convenience, it will be useful to sketch Mr. Hamby's continuation of the purely empirical plan at Georgetown, South Carolina, where he has been superintendent of schools during the current year.

Superintendent Hamby found that his knowledge of psychology was too scanty to enable him to lead profitable discussions on individual notes or on comparisons of a few notes; that the academic psychology of the books had no connection with the practical realities of the school; that so-called special studies and "statistical" studies were pseudo-scientific, even in the hands of bright "pedagogists." So he carried on the work begun in Marion somewhat in this wise: He found that the teachers were more interested in such practically important topics as fatigue and habit; but instead of having them "specially" study these subjects, he collated all their "spontaneous" notes bearing on, say habit, invited them to specially observe the manifestations of habit or lack of habit, and brought forward rough, practical inductions from the data, to serve as tentative and empirical hypotheses. Moreover, observing the strong tendency toward the concentrated study of certain children, he had the teachers record as many doings and sayings of these children as possible. Much of the study centered about heredity and environment. In this work Mr. Hamby and his teachers used as a guide, to some extent, "Bulletin No. 1, South Carolina Association for the Study of Children," prepared by the writer and used also in the Tompkins School. Mr. Hamby found that he instinctively reached a "canon" of child study contained (in substance) in the bulletin: "Study co-ordinately (1) all things in one or two children, and (2) one or two things in all children." His experience in general

bears out the "empirical canons of child study" appended to this report. He thinks that the teachers are benefited along the lines mentioned in the report on the work in Marion.

IN CALIFORNIA.

The work at the Tompkins School began as outlined for Marion and Georgetown, South Carolina. We mention a few additional items:

Many of the first notes were taken under such heads (not necessarily written heads) as these: Discipline, method, personal difficulties, successes, failures, "new ideas," etc., child study. Thus the child study had a pedagogical starting-point and setting. Some of the teachers wished to pay attention to special studies, such, *e. g.*, as arithmetic, under the head of "methods." This was not discouraged. They soon changed their attention from the method *per se* to the children as affected by the method. Some of the teachers at first found it pleasant to work together along the same lines. This was allowed, but all agreed that the work was most profitable and interesting when it centered about certain specially-marked children. Little "special studies" were suggested by the "spontaneous" material. The kindergartner, Mrs. Gould, furnished admirable material for "empirical inductions." In no case was a cut-and-dried, child-questioning, blank-filling-out investigation attempted under the direction of the department. Such attempts were discouraged or, when made, their results were treated as of no moment. When empirical investigations are made, whether by the "statistical method" or some other, one must at least be sure that the data are spontaneous and therefore approximately reliable.

Two needs came to us early in this year's work: 1. The need of finding out the motives that influenced children's actions; 2. the need of some system of classification based upon philosophically accurate principles. We collected children's spontaneous questions, their formal questions, their explanations of the needs underlying their questions, etc., etc. They easily grouped themselves under the rough classification of instincts given in the South Carolina Bulletin; but a closer and more psychological classification was wanted. Appended to this report will be found a table of "Needs and Instincts" finally worked out by the writer as a tentative, though rationally and empirically based, scheme of classification. A brief explanation of the principles underlying this classification is necessary, for the table of instincts has enabled us to combine, in a measure, empirical investigation by means of observation, experiment, and verification, with a more or less rational explanation of character by means of hypothesis. Before the table was used it was subjected to criticism by the teachers using it, by the Graduate Seminary for the Study of Child-Life (University of California), and by the graduate students in the writer's classes. The starting-point of the table is the list of instincts (instinctive or intuitive tendencies) laid down in the South Carolina Bulletin. This was interpreted in terms of the theory of development: 1. Development proceeds by differentiation and integration; 2. Development proceeds from the fundamental to the accessory. Thus the biological instincts are regarded as differentiating into the psychical (or individual) and the social. These are integrated into the æsthetical instincts, whose *differentia*, however, is not derived from the lower instincts. Rather, the æsthetical (theological, philosophical, and artistic) instincts integrate the lower instincts, and differentiate (along the lines of religion, philosophy and art) into logical and ethical instincts. These in turn are integrated with the other instincts and with each other into unitary character. The instincts, therefore, stand for large character-tendencies. They, therefore, should admit of a psychological cross-classification.

At the bottom our physical activities are static and dynamical, analogous to nerve-action and muscle-action, phenomenally felt as "thought" and "striving." But "thought" has a "content" side ("stuff"), and a "relation" side which is the essence of thought in the narrower sense. So "striving" has an out-going side and an in-coming side. Therefore, the general psychical scheme ought to be:

Thought: 1. Content or Fact; 2. Relation.

Striving: 1. Impulse (out-going muscularity); 2. Affect (crude stuff of "emotion").

After working on this scheme a while, we found that it was analogous to Preyer's empirical classification of movements, and that it represented the attitude of psychology, "old" and "new," "empirical" and "rational." We have found it to be of great practical use, although it is probable that the teachers could have made no use of it if they had worked without instruction extending over most of a year. What the scheme needs is severe criticism, practical and theoretical; although it has thus far stood both kinds of test and is, therefore, tentatively put forward at this time.

We have become convinced that embryology must furnish the most important hints as to method in child study; and therefore the *whole child* in the organic connection of its parts, bodily and mental, inherited and environmental, must be studied by the aid of all science and all philosophy, by groups of people, or by single individuals—if there be any such—who combine scientific and philosophical training and insight with practical experience and intuition. It seems to us that on the one hand, the raw philosopher or the man of science will miss the "feel" of reality, or on the other, the empiricist will heap up the veriest and direst nonsense, unless he contents himself with being a pedagogical naturalist.

The appendices to this very crude report will represent in skeleton outline the contributions of the Tompkins School to the empirical and rational sides, respectively, of child study. In the near future we hope to print some character-sketches which will have a practical as well as scientific value.

EMPIRICAL CHILD STUDY CANONS.

1. There is no essential identity of character possible. The study of individuals may teach us what combinations of traits may occur empirically. The study of groups may teach us what effects similarities of heredity and environment may produce.

2. A number of indications, under varying conditions, must point the same way, if our empirical inductions are to be useful.

3. In character-study, many-sidedness in the study of individuals is safer than a one-sided study of groups. For the individual, and the individual only, is a unitary monad reflecting the whole universe from his own peculiar standpoint. (Leibnitz.)

4. We have no right to declare empirical inductions unless observation of children's spontaneous doings, and sayings interpreted by doings, corroborate our conclusions.

5. The naturalist must precede the specialist.

6. The philosopher of scientific training, sympathy, and power must guide the naturalist and specialist.

7. Genetic psychology is the key to child study, and comparative psychology is the key to psychogenesis.

8. The results and methods of all the sciences and of all philosophy must be brought to bear on child study.

9. Observation, experiment, and verification, used comparatively and guided by the hypothesis of biological analogy, constitute the method of child study.

10. We must expect to find the common principles of humanity in the æsthetical, logical, and ethical instincts. We are to search for these amid the environment and heredity-produced and infinitely varying animal instincts (the biological, the psychical, the social) which in man always shows the traces of *human* activity.

11. Study successively, and as each step is taken, co-ordinately: 1. Whatsoever most interests you in your school experience as recorded in your notes; 2. Whatsoever most interests you in the children's recorded "doings and sayings;" 3. All things in one or two children; 4. One or two things in all children.

NEEDS AND INSTINCTS.

- | | |
|------------------|--------------------|
| I. BIOLOGICAL: | |
| 1. Nutriment; | 2. Metabolism; |
| 3. Spontaneity; | 4. Tonicity. |
| II. PSYCHICAL: | |
| 1. Fact; | 2. Relation; |
| 3. Impulse; | 4. Affect. |
| III. SOCIAL: | |
| 1. Company; | 2. Relationship; |
| 3. Co-operation; | 4. Fellow-feeling. |
| IV. ÆSTHETICAL: | |
| 1. Reality; | 2. Harmony; |
| 3. Imitation; | 4. Beauty. |
| V. LOGICAL: | |
| 1. Knowledge; | 2. Correlation; |
| 3. Reasoning; | 4. Continuity. |
| VI. ETHICAL: | |
| 1. Duty; | 2. Equity; |
| 3. Charity; | 4. Goodness. |

SCIENTIFIC AND NON-SCIENTIFIC METHODS OF CHILD STUDY.

BY WILLIAM L. BRYAN, UNIVERSITY OF INDIANA.

[ABSTRACT BY THE AUTHOR.]

I wish to speak upon these theses:

1. That there is a child study for the future—a scientific child study whose end is not to furnish rules for the schools of 1896, but whose end is perpetual investigation of all educational questions so far as these are determined by the nature of man.

2. That there is a child study for the present, a child study which is essential for every teacher every day, for her own sake and for the sake of her own school.

My belief that these two sorts of child study, though connected in

many ways, require sharp discrimination, has been strengthened by seeing a certain dilemma which, as it seems to me, American pedagogy to-day confronts.

On the one hand all authoritative voices are saying that to make the school what it ought to be, we need to know substantially everything. On the other hand, the children are here, and, with such ignorance or wisdom as we now have, we must now meet them.

There is no quick way to solve this dilemma. It is not to be solved by an alleged practical pedagogy, which is willfully indifferent to the conditions and laws and purposes of life. It is not to be solved by any scientific or philosophic theorizing which holds itself pure from daily contact with the actual school. Least of all is this dilemma to be solved, as for the most part the solution is attempted, by precocious compromise. Your cheap pedagogical tabernacle may serve some purposes today. It is not for that reason finally and adequately practical. You may make the teachers' institute believe that it is the arch of the heavens. God knows it is a circus tent.

The dilemma stands. If there is a philosophical solution, it declares that the actual solution is as deep as life and as difficult as the incarnation of God in the long birth of the world.

II.

Now as it seems to me the study of children is a means, not all the means, but an essential means of meeting both sides of this dilemma. I shall indicate in bare outline some of the ways in which this seems to me now possible and practicable.

1. I believe that the principal questions which interest American educators today, more particularly the question of the successive stages in human development, and the question of the interrelation of human activities and abilities permit themselves to be attacked by a number of specific scientific researches; and that authoritative conclusions in these fields must wait upon those researches. The current discussions of these questions have their own value, but the *determination* of the questions depends upon the actual nature of man's physical and mental development. I remind those concerned that analogous problems present themselves in general biology, and that the biologists of the world see no way of solving those problems except by infinite detailed research. They are not simply in search of illustrations for theories and laws and lines of development already known and agreed upon. Practically, every question is open. In particular, some of the very laws are in short questions which some educators have been inclined to accept from biology without verification.

I say to my friend, the educator, you cannot take equal rank with scholars in other lines; what is more important, you cannot master the field which you claim as your own, as men in other lines are mastering theirs, if you think that the vast, intelligent co-operative attack of scientists upon the problems which confront them can be matched with essays. Here, as it seems to me, is the proper work of the university professor of pedagogy. Free him from impractical demands, from immediate practical results. Give him a few of the best of those who have assimilated in college and normal school and in the school-room, the best of your current educational theory and practice. Let him show these few best ones an ideal and a programme. The ideal of attaining all the truth about man which can be reached by investigation should stir the youth as the visions of the prophets stirred the elect of Israel. This ideal should save the youth from the death of having no intentions except to resay forever and ever the same pedagogical platitudes, and should bring to them a new birth of faith and will to work. And a programme. Something to do. A definite ignorance. A method that knows its way. The man who can do this may be judged as you will at this date, but he and his pupils are the masters of the future.

III.

Child study for the present. I shall introduce what I have to say upon this matter by calling attention to a certain idea from Aristotle. It is a fact which seems to me of singular importance that Aristotle, who was broad enough to be the author of our deductive logic, the first great explorer in inductive science, and one of two or three in the field of metaphysics, should also have been able to see that learning of any sort cannot bake bread, or conduct a state, or of itself succeed in any art or occupation. His discussions, particularly in the *nicomachean* ethics of *ἐμπειρία, τέχνη*, and especially of *φρονήσις* (all which words are completely untranslatable apart from Aristotle's discussion of them), are worth the deepest study from all who are concerned with the practical relation between knowledge and action. The particular point which I wish now to emphasize is Aristotle's view that the conduct of affairs demands above all things what an American farmer calls judgment. He says repeatedly that the artist or statesman must not be exact in the scientific sense. Whether a teacher-artist in the presence of fifty children, or the educational statesman in charge of a great city, he is the practical mediator between all the world's culture which he has personally assimilated and the situations which he actually confronts.

Now, all of us will agree that this artist or statesman must be a constant student of child-nature. Easily said, but how? One sees

little anywhere except in answer to his questions. What shall we look for in this common-sense child study? There's the rub. Hegel has a thought like this, that the most significant thing is a universal which is also an individual. A man is a universal being who is also an individual. A poem is a concrete work with universal significance; so is a scientific conclusion; so is every valuable achievement.

Now it is easy to get individual child study questions; as for example, what is the color of John's hair? the answers to which have doubtless a value to science in the long run, but none to John's teacher today. It is easy also to get a great array of general questions by following the table of contents of any psychology. But such questions are sieves, which let every thing through that is worth catching. But a question which is individual, concrete, answerable after personal acquaintance, and at the same time significant, penetrating into the nature of the boy, so that he can be helped; that kind of question, (to say nothing of its answer), is just as hard to find as it is to write a real poem.

I believe that there is a class of persons among us especially well fitted to discover such questions. I mean the best of our women teachers. Some of them have the general culture, and the education in psychology and in pedagogy which enables them to judge of the significance of such questions and who are at the same time in daily contact with living children. I feel confident that there is among these best women a wealth of insights which are as concrete and as significant as the insights of other artists. I believe that such women can render an original service as great as that of any scientist, by making articulate their best insights and their most sagacious questions about child-life.

For every such insight and question can become in many other minds a center for the growth of the wisdom that is needed.

I look with something less of hope to the professional psychologists.

There are those who are saying that psychology of every sort is useless to the teacher-artist; that all the psychology of every sort from Plato down, cannot enable any soul to do anything in dealing with human beings that has not been done as well by those ignorant of all our learning. If we do not believe this; if we believe that such psychology as we profess can help teachers into any real increase of power, we must meet this challenge, not with arguments, but with results according to our promises. I say to my brother psychologists of whatever school, the waiting throng of teachers eager for direction is something not to be met with psychological doctrines, which are at

best only baked bread for them, but we must meet them, from whatever resources we have, with ideas that shall be in them as seed corn, gathering nourishment from the successes and from the catastrophies of each recitation.

*SOME OF THE METHODS AND RESULTS OF CHILD
STUDY WORK AT CLARK UNIVERSITY.*

BY PROFESSOR G. STANLEY HALL.

[AN ABSTRACT]

The subject which has been announced for my remarks this afternoon I fear hardly does justice to those who have been helping carry on this work in other places.

Let me first tell you the method we have been using. We have issued syllabi on the different topics, and propose tabulating the answers collected from a large number of individuals. We have issued thirty-two of these syllabi and have sent them sometimes to nearly 1,000 observers each. We have had them reprinted and shall be glad to send them to all who will drop me a postal-card request.

The first investigation undertook the study of anger, on which some thousands of returns have been digested.

The second study was on dolls. Dolls are historically closely connected with idols. The penates, or household gods, shade over into idols. Dolls serve the tremendous purpose of reducing the world to a very petite form, just the size for children to understand. In Russia there has been a doll congress, and official recommendations for the use of dolls. We have found that the doll passion culminates at the age of eight or nine. It begins with rude things, and passes through all the stages of development to the perfect paper or wax creations.

We next studied crying and laughing, two of the most important phenomena of the race. These are the oldest residual phenomena. The noise and laugh of the child take us back to the beginnings of the race. Just as when we laugh and shake we drop back for an instant toward bliss itself and catch a glimpse of paradise lost, so the laughter of children shows us a real paradise set in the midst of civilization. The child repeats and illustrates the history of the race.

Then comes the study of fears. Just think what a chapter that opens. Out of 4,000 people only three were found who had no fears. Thunder and lightning lead all the rest, though less than one-fourth of 1 per cent die of lightning or of thunder either. Aristotle says "Education is to teach us to fear aright." Surely we have not

advanced far on the road to wisdom. Fear cramps and arrests more than anything else all influence to good. Perhaps the chief end of education is to banish fear.

We then made a study of common traits and habits. We find that we each have characteristic movements, and these movements which we find in children beginning to write seem to show traces of residual movements going back to an earlier form of life. Just as fear of what has big eyes, fur and teeth, takes us back to the time when man feared animals more than now; so these automatic movements take us back to primitive times. We have thus traces of automatism, just as we have traces of gills, for example, in every human neck.

In the child's attitude toward nature we find something very akin to man's religious development. Every child is born a pagan, a fetish worshipper. Shall we try to stifle this phenomenon? Just as absurd to cut off a tadpole's tail and expect its legs to grow faster. It never falls off but is absorbed. To cut it off dwarfs its hind legs and ties it to an aquatic life. Just so with fetishism. This is the rudimentary organ—the tadpole's tail; cut it off and you dwarf human religion.

Another study was on children's food. We found all the appetites of all the animals. From the time that everything the child gets goes to its mouth, its arms are only tentacles.

Then we grew bold. We issued a year ago last spring two more syllabi, one upon love, the other upon religion.

We then made a special study of the dull child, and of the effect of different environments. We made here twenty-eight classifications. Then we studied old age; then music; then religious phenomena from another standpoint. Then we took up the "only child" and traced the effects of solitude. We even touched upon habit and instinct among the lower animals.

Some of the observers have organized themselves into societies. There are now several societies for studying children in Great Britain; one among the girls at Newnham College; one at Edinburg; one at Dublin.

Now for a few very general remarks about the future of child study. In the first place I believe it will show us the value of individuality. Children are different. As the Irishman said about the ladies, "They are all alike in being different." We must not forget that success in life depends upon the development of each individual in the particular line in which he excels. Every child should be thus developed enough to make a career. Not only because we live under a republican government, but because it is most economical.

In this connection let me say that child study is only one phase of this new movement in psychology; the front that is toward the teacher.

It also goes into physiology and has built up a small literature there; so also into insanity. It takes up the study of mental life in lower animals. Perez studied two cats. I know a friend who is studying a fly. That is a most fascinating study. Another studied the daily life of an amœba. These are all parts of one great movement.

The child repeats the race. This is a great biological law. We find numerous traces of this in the seventy-two organs of the body, and in many more rudimentary organs. This knowledge has developed since that eventful day when Fitz Müller began his studies on the relations of ontogeny and philogeny. Today we take up the literature of the race and use all the traces of archæology to fill in the gap. Alongside of this we can use the child as embodying at different stages the successive changes of the race. We get evidence of this development in the fossils. We find certain fishes like the fossils. We find the mastodon bearing certain relations to the elephant. We find the series so complete in the batrachian group that we can trace all the stages, including the gradual absorption of gills as it crept out of water.

All of these changes are implanted in the germ-cell by which we repeat in a few days or hours the history of untold ages. It is simply a means of economy. Not that we must pass through all these stages, but it is the *shortest* way to reach this stage of development. Sometimes we find in the course of development rapid leaps. Wherever there have been these rapid leaps there is greatest danger of arrest.

A word or two before I sit down about the two views with regard to acceleration. Should the process of development in the individual child be forced or should it be retarded. Le Conte seems to think the child must be forced. Certainly wherever nutrition can take the place of external force it should be allowed to do so. Another method has been to retard development as much as possible. So we have the school of savagery, so that they will leave the children open to natural development. We can trace the stages of the race in the child-life. The mind doesn't follow uniform laws of growth but develops now in this direction, now in that. If you could really succeed in developing the child according to any method ever written you would make him a hopeless idiot. Everybody is a Jack-at-all-trades at some time. As Russell says, he is a little homunculus in whom all traits are generalized. To dwarf any of these elements before the shades of the prison house begin to close in on him is to stunt him.

All of these different lines of work are gradually developing. You know you never find all the geologic stages represented at one place. But the science of geology must study many places, so we are slowly

finding our way, despite all doubtful criticisms, toward the real norm. Then, not till then, shall we have a real philosophy of education.

Now let me say a word about treatment. The way to treat the young child is not by fixed method. Jean Paul Richter warns us against letting the clapper rest heavily against the bell if you want a clear note. What the child soul needs is the light touch of the hand to guide the fancy which the children are so ready to take up. The child must be left to freedom. Interest is the main thing. If I had to choose between my child leading in some branch of study without interest, and his having no knowledge, but an interest in knowledge, I should infinitely prefer the latter.

Let me apply some of the results of our work. We are not in a position to apply all the results. We are too bound up in planting and digging about the roots to be ready to pluck the flowers. I rather deprecate haste for results. Though some facts I believe have been established which we may take into the schools. For example, I am convinced that drawing should never begin with copying straight lines. The natural child never makes straight lines or angles. It begins where most drawing ends, with the human figure.

So, too, with writing. I believe stress on writing should come two or three years later. Muscles are not developed so early. The fact of bad writing is against the present system. If we could put off writing two or three years and have it done within two years, we would make a saving and have better writers than now. So too with reading. I believe we could just as well begin with it later. A series of tests on memory powers might be given. Verbal memory of children is nearly as perfect as with the university student. Pestalozzi was right when he said give the memory something to do.

Then with modern languages. These should certainly be learned by the ear. The ear-method develops early. Think how short a time since writing began. How long before that all knowledge was transmitted from ear to ear.

In music there is a chance for a very radical change. Some of our music teachers are in a very bad way. The quality of music is miserable, and not the plan and methods by which it is hypertrophied beyond all sense and petty differences magnified.

So with regard to science, we are trying to make the child undertake college work with the microscope, or at least with technical terms. Science languishes because the child is not brought face to face with nature.

So with religion, we have got to go back to nature to understand what that really means, and begin with natural religion.

There is nothing more needed at present than a system of philoso-

phy. There was a time when we had a system of philosophy. Now we have many systems which are equivalent almost to none. Like the man who describes the driving in a foreign city: He hired a hack and got in to drive to his stopping place. The bottom fell out, he had to run hard all the way and then pay for the hack. Our philosophy has left us in that condition I fear. We need to get a method, to find out the true order of mind and let it express itself. I believe profoundly in this movement, humble though it is, a movement in which every teacher can help; where the kindergarten and college work together. This thorough study of the human soul must result in a radical reconstruction of all theories of morals, and give us a true ideal of the aims of home, school and church, and the true order of their development. It will give us vision, and without vision, the people perish. We must expect a slow radical transformation of almost all subjects taught from the kindergarten to the university. The work is rooted in the strongest human instincts. Love of nature and of children is the glory of manhood and womanhood, and the test of civilization.

CHILD STUDY A PART OF THE TEACHER'S ART.

BY C. C. VAN LIEW, PH.D., ILLINOIS STATE NORMAL UNIVERSITY,
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We seem to be rapidly approaching a more or less universal recognition of the fact that that contribution to the progressive educational movement known as child study has reached a point in its development where its merits should be acknowledged in practical and organic adjustment to the constructive work of education. From the scientific point of view, child study has been passing through the same stage of inception that is characteristic of any new science, and that is especially characteristic of the rebirth of all science—the accumulation of great stores of basal data preparatory to the inductive process. Indeed, the field has opened to the intellectual view so great a variety of possible and, as yet, unexplored lines of research, that the scientist is still willing to concede that this new science of childhood is yet in the initial stage. It is still concerned largely with an earnest and exhaustive inquiry into facts. While it has many truths to offer that must materially and immediately affect educational work, it cannot yet lay claim to the possession of any organized system of child-science. We are patient and willing to wait for the future outcome of research and experimentation.

But while the science, pure and simple, is thus bending to its laborious task, whose practical outcome in all its completeness is as yet but dimly sighted in a more or less distant future, the practical work of education must be dealing with a problem of immediate and pressing significance. Education finds itself dealing with a practical and constructive art, whose present perfection depends upon the power of the educator to call to his aid all the treasures of science bearing upon his task. Hence, while he is equally concerned with the investigator in the ultimate outcome of any science of childhood, his more immediate concern is the adaptation of his work to whatever science has already revealed of child-nature. A glance at the history of educational movements during the last decade reveals a tendency to bring a greater and more rational organization into the work of education. We are coming more and more to seek the inner organization that is based upon laws and principles, and to substitute this rationalized form of organization for one that formerly dealt chiefly with external and arbitrary forms of systematization. A large share of this newer work of organization has been based upon a study and analysis of the body of culture itself, together with an inquiry into the end of education as indicated by modern moral and social ideals and needs. We cannot gainsay the great value and need of reference to just these fields of educational inquiry; they undoubtedly embrace fully one-half the considerations that must be met in any educational system. But there is another body of facts that not only have already influenced the organization of educational systems to some appreciable extent, but which must undoubtedly receive still greater recognition in the future. I refer to all those facts of child-nature that the study of the child in recent years has revealed. A careful and candid survey of the recent results of child study, I believe, shows that we are in possession of truth concerning child-nature and child, development, that should be of great assistance in organizing and rationalizing both the school curricula and all educative activities, whatsoever. And more than this. Not only are the physiology and psychology of the child capable of giving us great assistance in adapting the work of education to the requirements of natural growth, but the very methods of child study, themselves, are full of suggestions to the educator as to lines of child study that are of especial practical, pedagogical significance. The methods and revelations of the child study movement have demonstrated that a true act of education implies certain lines of child-study on the part of the teacher, and that it is, therefore, quite proper to speak of "child study as a part of the teacher's art."

For the purposes of this discussion, then, and in accordance with

the thought already expressed, let us distinguish between "Child-Study Primarily for Scientific Purposes," and "Child Study for Immediate Educational Purposes." In making this distinction we shall not ignore the fact that ultimately the two lines of child-study may be closely parallel or even coincident. Both undoubtedly have contributions to make to practical educational work. Let us consider first the teacher's attitude toward that child study that is undertaken primarily for scientific purposes.

It may be a question in how far the practical teacher should be called upon to assist in that work of child-study that looks toward scientific results. Indeed, we are occasionally reminded that no one but a scientist, *sensu stricto*, is capable of making and recording observations that can really contribute to the scientific fund. On this point, happily, authorities differ. To my mind there is little doubt that the teacher can often make valuable contributions to the data of the science of childhood along those lines, especially, that require the massing of large numbers of illustrations. Two obstacles, in particular, may stand in the way of such participation, however; on the one hand patrons may regard the expenditure of time necessary as an unjust waste, on the other, the teacher herself, may find the new demand a heavy drain upon her already well-filled time. These obstacles, however, are not such as stand in the way of occasional help to the scientist from the school. If the demands are not made heavy in proportion to the regular work of the teacher, if the directions are clear and specific, if the study undertaken is one that calls merely for the exercise of good sense in the collection of familiar or easily determinable facts, which are to be turned over to the specialist without further manipulation on the part of the teacher than systematic collation, there would seem to be no valid reason why the opportunities which the school offers should not be occasionally utilized for such ends.

But we are at present especially interested in the contributions which our knowledge of child-nature, in its experimental stage of development, can make to the organization of the educational system, and in the influence which it will bring to bear upon the teacher, especially in her attitude toward the child.

We have long since advocated for the training of the teacher, as an essential preliminary to the actual work of teaching and directing the growth of the child-mind, the study of certain subjects supposed to have a more or less direct bearing upon the work of education. I refer especially to physiology, pedagogy, and psychology. We have regarded the absorption of certain well-founded psychological principles, for example, as constituting one of the most efficient means of rationalizing

the art of the teacher. Does not the teacher deal pre-eminently with mind? And should not the theory of mind (more particularly the right theory of mind) fortify her against errors in dealing with mind? We are not prepared to say that some such plan should not be followed to a limited extent. Undoubtedly the possibility of any mutual contact between child-mind and adult-mind is the presence of faculties and processes in both that are more or less alike. But the fact still remains that the teacher's psychology has been predominantly an adult psychology, and that it has been very far, indeed, from any concrete presentation of the genesis of mental life—the psychological fact, above all, with which the teacher is most concerned. If the pursuit of a more or less theoretical adult psychology has been a boon to the teacher in the past, how much greater blessing will be some acquaintance with the more concrete facts of the physical, mental and moral growth of the child? The need of some such generous supplement to a study of genetic psychology becomes the more apparent when we reflect that, without it—without some specialized study of child nature with special reference to her own art—the teacher is too prone to force the manifestations of child-life into ready-made standards of measurement—to see the child only in the light of very general and fixed principles. In this case her attitude is quite unprofessional because her standards are not yet adapted to the object of her special activity—the child. She has yet to learn that every generic principle or law of mind has its very special aspect in childhood, and that the phenomenon of growth itself is the prime factor in determining the variations in the conditions under which the law is manifest. In brief, then, the teacher's knowledge of mental faculties and processes needs to be very concretely specialized along the line of faculties and processes peculiar to growth in the child.

In view of the fact that the literature of child study is already replete with material that can revolutionize our notions of childhood, it certainly follows that a close and careful acquaintance with some of its standard products must infuse into the life of the teacher a power of sympathy and interpretation, before the data of child-life as they appear to her, that will rationalize the heart. Fortified with a knowledge of what is true, in general, of development and processes in childhood, she is far more capable to judge and treat the individual child from his own point of view, *i. e.*, from his plane of activity, to respond where she would have been blind, to adapt where formerly she would have been forced unwittingly to resort to the makeshift of a misfit. Thus, child study, both in the revelations of science and the actual work of instructing the individual child, becomes a part of the teacher's art. Thus may such works as Sully's "Studies of Child-

hood," Chamberlain's "The Child and Childhood in Folk Thought," the careful studies of the "Pedagogical Seminary," and many other works setting forth, not only the results of child study research both in general and in particular, but also the methods and conditions under which it is best carried on, be made to serve the teacher as valuable propaedeutics to her own work with the individual child.

But the value of child study to the teacher cannot be limited to a mere preliminary familiarity with the results of others' work. We are very close to the recognition of the truth that every individual act of instruction or guidance, must, itself, be equally an act of child study. The time is near at hand when the sympathetic interpretation of the individuality of each child placed in the care of the teacher, and the skillful adaptation of the work of education to whatever conditions are given in the child himself, will be the measure of the teacher's excellence. Reinforced by the data of modern thought and research, this task of individual interpretation and adaptation, should be far more efficiently accomplished by the teacher of today than ever before. There is a field of child study then, which is quite peculiar to the teacher's own sphere, one suggested by the nature and exigencies of her calling. Let her study and master all the general works on psychology and pedagogy she desires, there is not one of them that can arbitrarily solve the riddle of the individual school, the individual child, or the individual case. They may assist, in that they contribute to her power to recognize the type, but there is one prerequisite that must accompany all such deductive work of the teacher before it can hope to be rational, and that is child study. Without a study of the individual conditions before me, any method of procedure must remain hopelessly dead and mechanical. I can conceive of the work of the teacher, as she approaches her class for the first time, in no other light than as primarily a work of child study. Her method is pre-eminently the method of the individual; it is capable of just as careful and scientific application here as elsewhere. The individual method here permits of application to a variety of units. It may be applied to the study of the individual school or class as a social unit—to the individual child in his entire nature as one of its organic members and as a prospective member of a future adult community—to the individual case of treatment or discipline, as furnishing in itself a special unit of effort for the teacher.

The individual school or class, as a social unit, offers for the teacher many very interesting and significant problems of child study. That teacher will render a service of inestimable value to the local school who will make an exhaustive study of the local speech-peculiarities. Few of us are aware how considerable these provincialisms are in

certain districts even in the western states and how thoroughly they enter into the child's life, both as ready and potent means of communication on the one hand so long as he is conversing with those of his locality, and as genuine speech limitations on the other. Similar lines of study are suggested by the local traditions, that inevitably enter into the mental life of the school, and local beliefs and customs. Child study always ultimately brings the teacher for a time to the study of the stimuli of child-growth, the natural and the social environments. Of course such a study of the molding influences of human and natural life of the locality implies the application of something more than the individual method; but the main movement in such a study, and the end it has in view, to characterize some phase of the child's social and natural environments as an individual, are essentially the work of the individual method.

Probably no more charming study can be undertaken by the teacher than that of the nature and growth of the individual personality. It is not generally recognized that Herbart's first pedagogical work was a study of this kind, carried out with reference to the three boys placed in his care. One of these, which is virtually a study in adolescence, I cannot forbear quoting here. In summing up the result of his study of the nature of Louis von Steiger, Herbart says:

"In so far as I am acquainted with Louis, as yet, I believe we must ground all hope purely in his understanding. He is, perhaps, too healthy, feels too well, possesses too cheerful a temperament, as yet, to give place in his heart to tender sensibility or intimacy or firm attachment for any human being, science, or favorite ideal, whatever. At the same time, of course, he is certainly quite safe from every kind of fanaticism, whatever it may be. On the other hand he is impetuous in his desires and not accustomed to resist them himself voluntarily; hence, in view of his rapidly developing body, I fear, after a couple of years, a vehement storm on the side of animal sensuality. Left to himself, through this vivacity of the desires, he would become an egoist; and, since his natural understanding would be darkened neither by love, ambition, curiosity nor any other ruling propensity of this kind, he would become a very consistent, wise, and deliberate egoist. Through proper guidance, however, such a disposition may be developed to a most admirable many-sidedness of interest; to the greatest clearness of understanding, because of its freedom from all of the more decided propensities and from all fanaticism; to great energy of character because of the probably threatening battle with sensuality; and finally, to a happy sensibility for pure joys of every kind, because of the cheerful temperament. But what an endlessly difficult task! After all, one must be able to take hold of him some-

where in order to lead him. One must have wind in order to sail: One needs a mainspring, a motor, in order to produce activity. Since no such motors are active in him, and since the gifts of fortune prevent his feeling the spur of outer circumstances, that so often powerfully urge forward the children of needy parents—what is left but his bare understanding—and the hope that this weak and motiveless spark shall one day kindle self-active thought and the endeavor to live in accord with his insight? This hope is already strengthened in me by the visible growth of his attention since I have been working with him. The deadly *ennui* that characterized him has disappeared." Again, "Louis's long, dry sermon was to me an unpleasant proof of his meager sympathy and of his propensity to notice the errors of others more than anything else that concerns them, and to assail these without mercy. Traits of this kind he evinces daily."

I have given this illustration at some length (though it is but a fragment of the original) to illustrate somewhat of the power which I believe familiarity with the data and methods of child study should be able to cultivate in the practical teacher. Such study of individuals, extending even to an inquiry into the antecedents and influences of the home environment, including somewhat of the early biography of the child, cannot fail to be of very great service to the teacher, both in training her powers of child-interpretation, and assisting her in the solution of educational tasks. Every such individual study gives the teacher control over a type. Her skill as an artist-teacher has become so much the more intuitional, so much the more a second nature to her.

Again, the individual method is called for in many cases of special treatment or discipline. I have in mind at this moment a case of a boy who puzzled his instructors for some time; yet he is undoubtedly one of a more or less common type. As a pupil of nine years he displayed keen powers of observation, broad grasp and clear understanding, lively interest and unusual language ability; intellectually he was superior to any in his class. In conduct he was very much a gentleman and apparently exemplary; yet periodically he was addicted to larceny, petit and grand; upon discovery he gave every evidence of sincere repentance, and especially of capacity to realize the gravity of his position, while at the same time making a clean breast of the affair only by a descending series of wholly unnecessary and useless lies. He was addicted also to the occasional narration of marvelous figments of his own brain. But the genuineness of his work as a pupil was quite in contradiction with his occasional return to one or the other of these two degenerate habits. Here was a case which ordinarily might have been briefly disposed of by stamping the boy as a

thief and a liar, and proceeding to some extreme form of punishment accordingly; but a careful inquiry into the conditions under which these acts appeared, into the social position and attitude of the boy among his comrades, into his acts and expressions at other times, which were in any way relevant to the individual case, revealed something substantial as to the motives which actuated him. When motives have thus been once determined by the study of the case in all its bearings, there will usually be revealed some basis for pedagogical activity that is truly educational and reformatory, and not merely retributive or punitive.

Enough has been said, perhaps, to indicate that the method of the individual is peculiarly the method of child study for the teacher. The field and possibilities for its application are practically unlimited. It would seem to be the better practice, however, with so broad a field before the teacher, offering child study work bearing directly and fruitfully on her special function, to eliminate those lines of study that are designed merely to verify some well-worn truth, to satisfy mere statistical curiosity, or to undertake a problem on a narrow scale which only breadth of research can adequately deal with. A great deal of this kind of work is being done with the result that benefit is meager, and faith in the movement of child study not enhanced. Least of all do I believe its best interests, educationally, furthered by a scrappy and indefinite connection with the individual school or system of schools. Let it be genuine, careful, but let it contribute to the specific educational needs of the school.

Gradually we are working toward a position in our science of the child in which we shall be able to formulate some notion of what the educator desires very much to know about, so-called age-types. When we are once able to characterize in a satisfactory manner the successive age-types of childhood and youth, we shall have a basis for the successive and co-ordinate arrangement of the materials of instruction and of the various school activities in the curriculum, that is as yet but dimly realized. The work has already been attempted by Direktor Hartmann, of Annaberg, Germany. His work leaves much to be desired, but it also contains much that is suggestive. Many of our ablest teachers of long standing carry with them as a part of their professional equipment certain more or less well defined notions of these age-types. An article in the last Year-Book of the Herbart Society on "Literature in the High School," by Dr. J. Rose Colby, of Illinois, contains an admirable analysis of the age-type of the student upon entering the high school. The analysis, which is evidently based upon a wide and sympathetic acquaintance with just such students, illustrates very aptly the value which a thorough characteriza-

tion of these types has for the work of education, for it has been the aim of the author to determine the succession of subject-matter chiefly by the growth and predominance of interests and intellectual tendencies in the adolescent student. Such analyses, wherever they can be secured, should be brought together and their data compared and harmonized.

But already the more scientific work of child study has brought to light a great deal of material that will serve in part to advance us toward a practical recognition of the different age-types. Already we know something of the succession in the muscular development of the child, something of the periodicity of the child's physical growth and the limitations which it imposes upon him, something of the successive emphasis of mental powers at different ages, something of the true function of the peculiar activities of childhood, as play, graphic representation, etc., something of language development and its relation to mental development; but when are these truths going to be allowed to have their legitimate effect upon the work of education — how long must it be before they are regarded as absolutely essential factors to be considered in framing any curriculum of school studies and school activities? That they are still very largely ignored is a fact too patent to need demonstration.

In conclusion, I may sum up my position as follows: In its present stage of development the science of child study has much to offer that will assist the teacher in her art and that must be recognized in a rational treatment of the child. Hence, the scientific results of the subject that may be regarded as established not only furnish a valuable propaedeutics for the teacher in her work of adaptation to the individual, but a guide in the formulation of the curriculum. In addition to this each act of education, itself, implies an act of child study on the part of the educator, for he is ever dealing with the individual child or school, adapting to individual limitations, needs, and capacities. Thus we see that the work of education is to be reinforced and rationalized at every point by the work of child study. Child study is to become an integral part of the teacher's art. If this be granted, I believe it to be the duty of the practical educator to bring about some organic and intrinsic relation between child study and the constructive educational work of his particular field.

INTERESTS IN CHILDHOOD.

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[ABSTRACT BY THE AUTHOR.]

I.

During the past six months the members of the child study classes in the School of Pedagogy and in the Kindergarten Training Class of Buffalo, together with the writer, have been gathering data upon children's interests, among other things, and it will be the purpose of this paper to present briefly a few results already reached that may have some pedagogical significance. The primary motive in making these studies was to furnish our students occasion to come into close communion with child life; but it was also thought that by carefully searching in various directions for the things that attract children, it might be possible to see more clearly than we now do some fundamental principle underlying interest. Studies were thus made upon interest in pictures, in games, in nature, and myth literature, in the æsthetic and utilitarian, in the causal idea, and in future occupations. Three methods were followed in gathering most of the data. In the first place, 160 children were examined individually in the first four lines of interest named above by the members of the kindergarten class and the writer. Secondly, about 3,000 essays were secured from children in the schools of Buffalo and outside, indicating special interests and stating reasons therefor. And lastly, the writer visited a number of schools in this city, gaining an expression of interest in pictures and games by pupils in the various classes, from the first grade up, the children being grouped about the experimenter at each test, and voting together upon those pictures and games they liked best. The purpose of this last work was to observe whether the spontaneous expression of quite a number of children at a time would bear out the results reached by individual study; and in recording results, not only were the votes enumerated as accurately as possible, but the expression of the children's faces was also noted, and the enthusiasm which they manifested for particular games by expressive movements of the body, vocal utterances, etc. It must be said with emphasis that the thoughts suggested by these results are not offered as well-established conclusions, for the reason that the data is not extensive or varied enough; it is only hoped for them that they may call attention to certain practical pedagogical questions that are worthy of careful investigation by those who have opportunity.

II.

Our returns in all studies were examined in the first place to discover what they indicated as to the interest of children in things æsthetic. In the study upon pictures, one having marked æsthetic characteristics was shown to the children together with one where the æsthetic elements were not so prominent, and they were asked to choose which they preferred, giving reasons therefor; and this was repeated a number of times in the oral tests with different pictures. In choosing between black and white and colored pictures, children of all ages, from four to fifteen, seemed never to hesitate to choose the latter, if the subject was the same, or nearly so, in both. Many say in explanation of their choice, simply that they like them because they are colored; others say they are prettier, and a great many that the look nicer. Some say that colored pictures look more natural, more lifelike, and so on. All reasons seem to indicate that plain black and white pictures create but little warmth of feeling comparatively. Whenever black and white is chosen rather than color, it is practically always because some special characteristic, some particular object in the picture has peculiar interest for the individual. It seems possible to say, and this is by no means new, that color in a picture universally claims a child's attention over black and white. The question may be asked in this connection, why illustrative pictures in children's books should not be colored to represent life so far as possible.

Our returns show that children up to twelve years of age are greatly interested in another form of the æsthetic, that which is designated in the child's language by the terms "cunning," "cute," or by some similar term. Pictures of animals, as cats and dogs performing interesting and cunning tricks, were shown the children, and they always received, not only the votes, but also a demonstrative reception on the part of the children, no matter what sort of pictures were competitors, except in the two cases of a mother and babe, and Santa Claus. Children seem always to pick out a baby, a kitten, or a puppy in a picture, and usually say they like it because it is cunning; sometimes lovely, dear or sweet. The elements of brightness, kindness, affection and beauty comprised in the term "cunning" appear to lay claim at once to the child's whole personality; and this seems to be a most unselfish interest, indicating the child's love of and need for what is joyous, happy, and withal good and beautiful. If the self is involved here at all, it can only be that these cunning objects revive memories of similar objects with which the child has engaged in play, or suggest to him occasions for immediate or future play; and it is doubtless true that those feelings which have become centered

around an object are readily revived in the child's heart by that thing in representation.

But while children thus appear to love color and things cunning, the æsthetic in the highest sense does not seem to appeal to them. A number of beautiful portraits, scenes, and landscapes, reproduced from the best paintings, were shown in connection with commonplace views of waterfalls, of a child and dog frolicking together, and similar pictures, and the masterpieces received scarcely any attention at all. The falls had a greater interest for the children of Buffalo because it was thought to be Niagara Falls; and many also liked to see water flowing. The little girl and dog, which she was striving to make talk, were exceedingly interesting because they were cunning. A fine portrait of Mozart was chosen by a large number of children over a colored view of Pike's Peak and surrounding region because they thought him to be George Washington. A beautiful picture by William Kray, representing a love scene and entitled "In the Moonlight" was chosen by many children above the third grade; but in giving their reasons they said they liked the boat, or they liked to be upon the water themselves, or they liked to see the moonlight upon the water, but never that they thought the actors or the scene itself was beautiful. A photograph of mother and child compared with the Madonna will gain the favor of all children except those who have in their homes been taught that the Madonna is the mother of Christ; and such children, we found, always spoke of her in the most tender and reverential manner. It was the same way with St. Anthony and the Christ Child; the few who chose this picture said that St. Anthony looked like the Savior. Most children said that in the picture of mother and child the little babe was so cunning, so pretty; a few that the mother seemed so affectionate; and a half dozen gave as their reason that it was a photograph.

So it seems probable that what the adult gains in thought and feeling when he sees in a picture a beautiful face or form or landscape, or combination of these, is most often missed by children. Perhaps the explanation is that appreciation of what is beautiful in the highest sense depends upon a wealth of experience which the child cannot possibly possess. The adult doubtless discerns in the truly beautiful more than perfection of form and ideal harmony of color; he sees back of these to the spiritual qualities of which they are the visible expression; and thus his idea of the beautiful is exceedingly complex. It awakens many memories, which have become deeply associated with rich emotions, and all of this is probably beyond the young child.

The question is suggested, in passing, whether there may not now

be a tendency to expect too much from the influence of the best art in the classrooms of the very young. A painting or a bit of sculpture that is inspiring and elevating to the adult will not, in all probability, have the same effect upon the child. What one gets out of a piece of art seems to depend almost wholly upon what he brings to it; and so far as we wish to keep the æsthetic in representation before children, it should be in the form of brightness and cheer in color, and that which is described by the term "cunning." The portrayal of beautiful objects which the child can appreciate, as flowers, for example, will also awaken refining and elevating responses in him; and it seems highly probable that these, in a way simple things, will have a greater effect upon young children than reproductions of the greatest masterpieces, judged from the adult standpoint. In our studies, to illustrate, we found that the Angelus aroused less interest than some brightly colored roses.

Children's interest in the æsthetic was tested in another way by asking them individually what they thought about many of the common objects within their environment, such as articles of household furniture, and of dress, animals, heavenly bodies, as sun, moon, stars, and so on, and writing down the answers which they gave. Less than 10 per cent of the returns show any æsthetic thought; but this may be accounted for partly, perhaps, by the form of the questions—"What is a dog?" "What is a cat?" etc. A more pointed test was made, however, by asking these same children which they would rather have, some object of æsthetic interest, as a white rose, or one mainly of utilitarian interest, as a handkerchief or overcoat, and they were also asked what toys they liked best and why. These questions made a direct issue between the utilitarian and æsthetic interests; and in 80 per cent of the answers the æsthetic prevailed; almost always a picture was chosen before an overcoat; a rose before a handkerchief. The interest in the rose quite generally had reference to the olfactory sense. A few times it was chosen because "it is better," "looks nicer," or "because it is nice to pin on you," and a picture "is prettier," "looks nicer," and so on. One liked her dishes best of all her toys, because they were so little; several liked handkerchiefs because they could keep their noses clean; or because they were nice and white, and a number wanted overcoats because they could wear them on Sundays. The æsthetic interest in an overcoat, to have it to wear on Sundays, prevailed over the very enticing utilitarian one, to keep warm. Perhaps, however, it was not a pure æsthetic interest, for pride may have had something to do with the choice.

III.

The returns in all studies were examined in the second place to ascertain children's interest in activity, as shown in their games, as represented in pictures, and as seen in objects in nature. In the study upon games, twenty, commonly played among children in this vicinity, including quiet, thoughtful, active, and love games, as we decided to classify them, were written upon the board at a time and the children were asked to choose the three they liked best, giving reasons therefor. Forty games in all were thus written; and the third day the children were asked to write all those they knew, choosing the three they liked best, with their reasons for their choice. One hundred and six different games were mentioned as favorites, and those most frequently chosen were: Blind-man's-buff, baseball, I-spy, hide-and-seek, duck-on-a-rock, pom-pom-pull-away, of the active sort; and of the thoughtful games, checkers, authors, and dominoes, were the only ones that received very many votes. Checkers received more than both the others, and more than any other single game. Of the quiet games, old maid and tick-tack-toe received the most votes; while of love games, post office, clap-in-clap-out, and drop-the-handkerchief were most numerous chosen. The reasons given for liking nearly all these games seem to point unmistakably to their affording occasion for activity as the source of interest. Even in checkers, many say they like them because they are exciting. Dominoes for some are very exciting. But the great majority of reasons read like this: "It is great fun," "I like to run about and hide," "It is good exercise," "There is lots of running and jumping," and so on.

While boys and girls both like active games, they do not like the same ones, the boys uniformly choosing those which are intensely active, and involve more or less pulling each other around, hard running, and tussling. The girls choose games which, although active, only require light running or dodging and hiding, and they do not frequently choose those that will bring them into physical combat with each other. The following are girls' games: Authors, fruit-basket, as-we-go-around-the-mulberry-bush, spin-the-plate, clap-in-clap-out, tick-tack-toe, bean-bags, forfeits, hide-and-seek, and blind-man's-buff, while the boys like these: Baseball, pom-pom-pull-away, snap-the-whip, I-spy, tag, duck-on-a-rock, leap-frog, football, and hounds-and-deer. The difference between the boys and girls appears more marked as they grow older, and from twelve years up we find the boys choosing baseball, snap-the-whip, duck-on-a-rock,

and football largely, while the girls choose tag, hide-and-seek, croquet, and games of this character.

It is quite suggestive, too, that older boys like certain games for the opportunity thus given to hurt some one or get injured themselves. Quite a number of boys from eight to thirteen give as reasons for liking snap-the-whip that it is great fun to see the one on the end thrown off and get hurt. It is the same with other games as baseball, shinny, and pom-pom-pull-away. The following written by an American boy, thirteen years of age, is a specimen paper, although it could hardly be called typical. In choosing the three games he liked best, he says: "Baseball, because the girls cannot play, and there is lots of sport. If you get a crack on the eye it will hurt. Shinny, because you can play at any time of the year, and there is lots of fun. If you get a crack on the shins from a club or the bund, you will not feel like playing any more. Pom-pom-pull-away, because you can punch and hit the fellow that goes to catch you." Another American boy of fourteen likes the following games best, with reasons: "Baseball, because there is lots of sport in it. Duck-on-a-rock, because there are lots of chances of getting your leg broke and have to stay home from school a week or two. Snap-the-whip, because it is fun to see some of the boys get thrown off the line and go rolling around the street for a while." In 1,080 reasons given by girls for liking games we found only three in which this interest in hurting some one, or being hurt, appeared. The interest of boys in the rougher games involving some danger, and in which there is opportunity for personal combat, would seem to be in harmony with other characteristics that begin to appear at the approach of the adolescent period.

A very small per cent. of those who chose the quiet games seemed to like them simply because they required no activity. Some say of authors that they can be played any time of the year; that they like to play with cards; that they are instructive, and so on, indicating interest in some other characteristic than quietness.

Children seem also to be attracted by activity in representation. In the study upon pictures the children were shown several groups portraying active and quiet scenes, and asked to express their preferences. The reasons given show that children like activity in representation because it suggests to them similar activities, in which they might indulge or have indulged themselves. In securing the expression of a large number of children at a time, it is easy to determine, the moment they see two pictures, what it is that arouses their enthusiasm. It would seem in explanation that represented activity revives the feeling which children have for the original, and so the representation becomes endowed with interest.

IV.

The returns show another line of interest that seems quite marked in both boys and girls. Many children above nine give as reasons for choosing certain active games like tag, or pom-pom-pull-away, that they are "very good exercise," or that "they cultivate the muscles." Other games like checkers "exercise the brain," "teach one to move like a general," or "it is a sensible game." The geography game "is a sensible, instructive game." In the studies upon nature and myth literature, all children except those in the third grade in school have greater interest in a lesson upon a natural subject, as a robin, a calla lily, or a grasshopper, than in a myth relating to that object; and the reasons most largely given are that they learn more from a natural object than from a myth. Many say they can remember what they learn better, or they will be able to teach it to others. Some of those who choose the myth over the natural object do so because it gives them something which they cannot get from the object, either some objective attribute, or the moral teaches them better manners or other useful things. A few like to come into direct contact with nature rather than approach it through the myth, because nature is true, and the myth may not be. It would seem that many children are interested in things that promise self-improvement, either physical or mental, although a few, perhaps many, children have given these answers because of environing school conditions.

V.

The returns in the separate studies indicate some further lines of interest that may be but touched upon here. In the study of pictures, a brightly colored one of Santa Claus and his deer was shown with an equally brightly colored one of some boys and girls playing together, and the latter received almost no attention at all, the children voting instantly and unanimously by face and voice, as well as uplifted hand, for Santa Claus, thus showing what a hold he has upon the hearts of children of all ages.

Children often miss the true import of a picture, seeing therein only some simple object with which they are specially familiar, and which revives memories of previous associations. It seems possible to say that objects and events which have in themselves greatly interested the child at some time will have something of that same interest for him when portrayed in pictures.

On the whole, young children seem comparatively little interested in grand portraits of men and women which the adult admires,

because they give expression to exceptional qualities of intellect and character, appreciation of which is quite beyond the tender age of childhood. However, the natural and lifelike in portraits seem attractive, as shown in comparing the photograph of mother and child with St. Anthony and the Christ Child, and also with the Madonna. One might be justified in saying that an everyday, concrete individual is more attractive to children than the ideal of poet or painter.

In the study upon games several gave as reasons for choosing certain ones that they liked to play for money; some liked to play with cards, while others have their interests determined by the opportunities for rivalry. The boys always say they like the love games because they like to kiss the girls; but only three girls used the word kiss at all. They gave all sorts of ingenious reasons without ever coming to the point. The following are examples: "I like Ruth and Jacob because there is not very much danger of any one getting hurt, and it is nice to play at parties and picnics," "I like post-office because the girls like to kiss the girls," "I like clap-in-clap-out because it is a reasonable game to play," "I like forfeits because it is so much fun redeeming the forfeits." Only two girls like love games because the boys have to kiss the girls.

VI.

In summary, then, it may be said, (1) that children seem much interested in the æsthetic as it is expressed in color, as described by the terms "cunning," "nice," "sweet" and "lovely"; and also as it is an attribute of their playthings and the natural objects surrounding them. They are not, however, attracted by the æsthetic in the highest sense, as embodied in the greatest masterpieces of art, probably because they have not had the necessary spiritual experiences to interpret such art. (2) Children are interested in activity, both in their games and as represented in pictures. Boys like rough games where there is opportunity for personal combat, for injuring others, and for getting hurt themselves. Girls like active games, but not the rough sort. (3) Many children above eight or nine years of age are interested in that which tends toward self-improvement, either physical or mental, and they also welcome that kind of knowledge which has the aspect of truth rather than of fiction. (4) Santa Claus has a strong hold on the hearts of all children. (5) Children oftentimes miss the true import of a picture, seeing therein only some simple object with which they are familiar, and which revives memories of previous associations. (6) Children are comparatively little interested in grand portraits of men and women which the adult admires. (7) The natural and lifelike in portraits are always preferred over the ideal of poet or painter. (8)

The instinct for gambling and rivalry appears very early in some children; lastly, (9) Girls are diffident about expressing their pleasure at receiving attentions from the opposite sex, while boys profess their fondness for girls in plain terms.

*RELATION OF CHILD STUDY TO THE WORK OF A
CITY SUPERINTENDENT.*

BY C. B. GILBERT, ST. PAUL, MINN.

[ABSTRACT BY THE SECRETARY.]

The dogma of original sin has consciously or unconsciously dominated education for a long time. According to this doctrine the child is put into the world evil and must be reconstructed in order to be saved. This belief rendered child study unnecessary. The widespread interest in this subject is a witness to the great change that is taking place in our way of looking at this matter.

Child study has two branches. First, the work of the scientist. By recent advances we are led to hope that in time we shall get some new principles to aid us in directing the evolution of the child. The business of the teacher is to get out of the child's way and to take other obstacles out of his way; so that the lines of least resistance and the lines of education shall coincide. Now the scientists are going to tell us how to do that. They are working out a body of principles which shall take the place of the old false theology. The other branch is the work of applying these principles, so that the teacher shall study the children for the immediate good of the child. The teacher has to do with the child every day, and, if no more comes from child-study, the immediate benefits along this line will more than pay for all the trouble.

Between these two branches stands the school superintendent. He touches both. He must be acquainted with the facts and aid the scientist in collecting facts. Here I must protest against putting into the hands of large numbers of teachers series of questions delving into the soul of the child. He who seeks to enter the inner life of the child needs the greatest care. There is danger of making the children self-conscious.

There is also danger of false answers. Not one person in a hundred is a good witness. I wonder how many of you have ever been to an oculist. You know then how easy it is to make mistakes in so simple a thing as reading the letters on a test card. I find that teachers are liable to weave their own psychic life into the answers of the

children. Now, I am profoundly in sympathy with this work, but the superintendent ought to take charge of the whole matter, decide upon the methods to be employed, and select the teachers who are capable of carrying out such investigations. In a city of 10,000 inhabitants he will find perhaps five.

Now, the other work of the superintendent is to take the work of the scientist and bring it to the aid of the individual teacher. Dr. Hall says that we won't believe him when he says that child-study will work such great changes in the schoolroom. Some of us do. We have been working along this line for two years. In this work the teacher must study the individual child, not the generalized child. She must leave that to the scientist. It seems to me the best way to begin is to give each teacher some one thing to study. For example, the eyes, or the home environment of every child in the room. Any teacher can do this work. The results will of themselves be valuable, but the most valuable thing about it will be awakened interest on the part of the teacher, when she has a more accurate knowledge of the children. She is no longer dealing with a room full of strangers. Perhaps the most valuable result from all this child-study work is the breaking up of *mass* teaching and leading the teacher to focus her attention upon the individual child.

WHAT CHILDREN WANT TO DO WHEN THEY ARE MEN AND WOMEN.

BY PROFESSOR CHARLES H. THURBER, CHICAGO UNIVERSITY.

[ABSTRACT BY THE AUTHOR.]

A little over a year ago the Department of Child Study was organized in the Department of Public Instruction of the State of New York. It was recognized from the first that it was important to suggest some work which would be interesting and could be easily carried out, in order that the sympathy of many teachers might be secured. To this end a syllabus was prepared of a Study on Children's Hopes, in which full directions were given to the teachers, and the children were asked simply to write essays as part of the regular work of the school on the subjects, "What I Want to do Next Year, and Why," and "What I want to do When I am a Man or Woman, and Why." Thousands of replies were received, examined and collated. Contrary to expectations, few of the papers were extravagant or impossible in their statements. Especially notable was the contentment with their lot shown by most, the pleasure with which poor children look

forward to the severe labors of the future, and the willingness to share the burden of supporting the family. It is interesting to trace the increase of seriousness and depth in the reason as assigned in answer to the question "Why?" As regards their attitude toward life, the characteristic idea of the more thoughtful in the last three years studied seems to be that of giving up the old elastic joyousness and admitting the fact, as one states, that "there is generally something unpleasant in almost everything." A boy of thirteen says of his chosen profession, "This business, as all others, has its faults, but I will have to be patient and persevere." The ethical basis for desiring moral qualities is expressed by a little girl fairly well, "Everybody that does good always gets a reward." All are confident that some personal, material, or social benefit accrues from virtue and is the reward of goodness. A most interesting phase of the papers is found in the ideas of children about different kinds of people.

Two boys wish to be priests; for, as one says, "I can save my soul." The impression among several seems to be that, "a minister leads a pretty easy life, sitting round doing nothing all day." The lawyer must be "well educated" and "smart," which seems to imply ability to cope with the world; he makes "lots of money," and with a few his profession is "noble." Some strange ideas are found, as "lawyers make the laws," it is their duty to "enforce the laws," the study of law "learns one not to disobey the laws and what severe punishment is due to disobedience." Bookkeeping appeals to the girls as "nice clean work," "with good pay," and "easy," provided one is "sufficient in matematics, spelling- and algerbia." With some, present studies are simply preparations for such work, the desire being to "make use of my knowledge." Four boys wish to be President of the United States; their idea of the office seems to be that it confers the power to "stop saloons and gambling dens," that it enables one to "earn plenty of money," that "it shows people's confidence in you."

Of all subjects of study the one which seems to impress children most in their ambitions in life is geography. This is seen in the desire for travel, which in many amounts to a passion. The influence of history is seen scarcely at all.

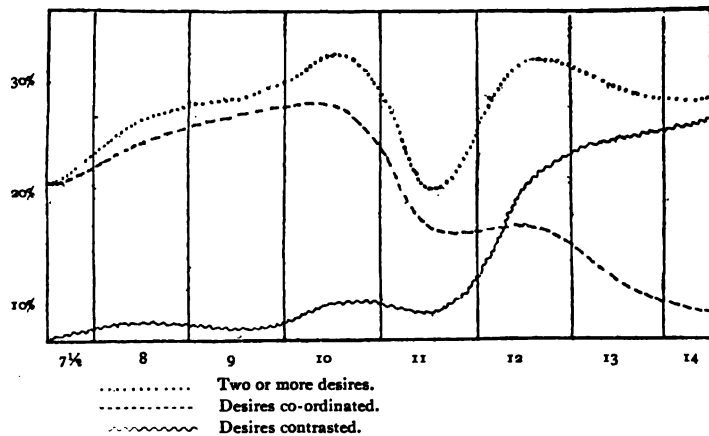
The study is, of course, suggestive only. There are many breaks, there are many imperfections, yet it is at least stimulating to summarize briefly what has been found true of the different ages.

Characteristic then of seven is the reply in general undefined terms or by mention of those special processes or incidents that suggest an occupation; the desire on the part of the girls to be storekeepers, on the part of the boys to be soldiers; the ignoring of the question "why?" and the statement given as reason for choice of an occupation that their fathers or relatives have the same occupation. At eight there are as many who give no reason for their choice as at seven; the trades enjoy the greatest popularity at this age. At nine culminates the desire of the girls to be teachers; among the boys the choice of their father's or relatives' occupations; and at ten the co-ordinating of desires, and the reasons, "because I like it," "because it's nice." At eleven all the ideas and tendencies

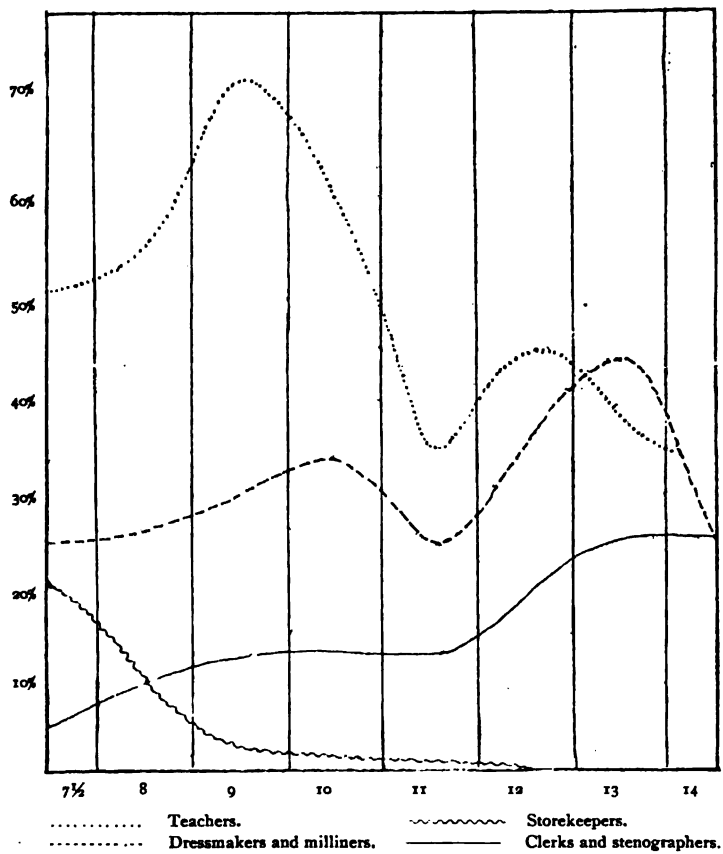
are increasing toward a maximum in previous years. At twelve we find the altruistic desires for the welfare of parents; the reason "to earn money;" at thirteen the desire on the part of the girls to be dressmakers, also to be clerks and stenographers. At fourteen among the boys the desire for a business career in bank or office culminates, the criticism of the question which began at thirteen, the consciousness of life's uncertainties which appeared first at twelve, the desire for character, the hope of doing the world good.

The results of studies have been expressed in the following charts:

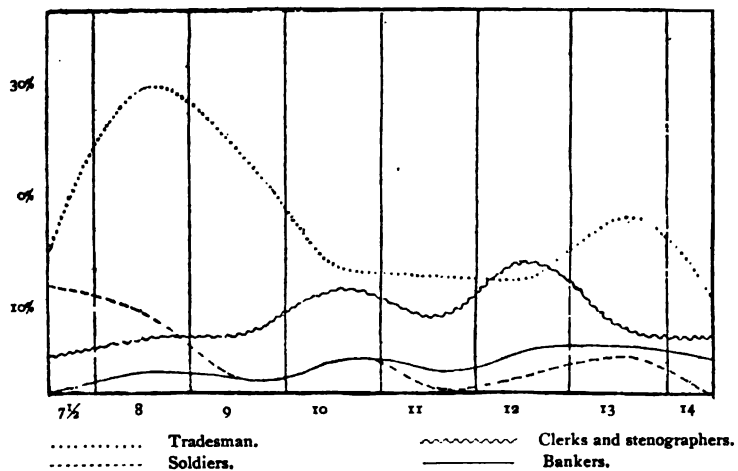
I.



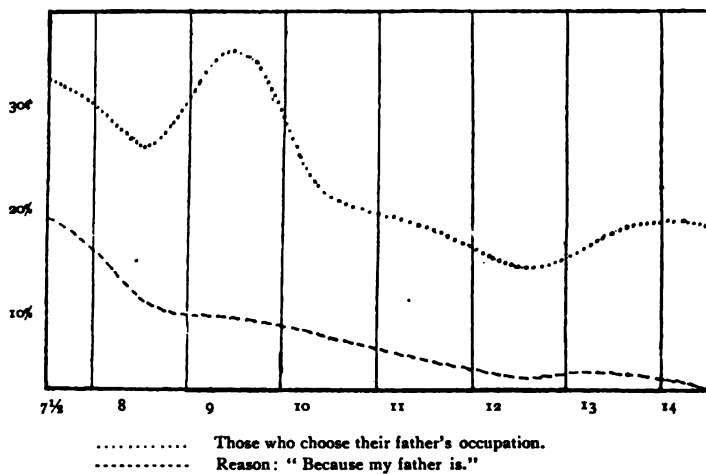
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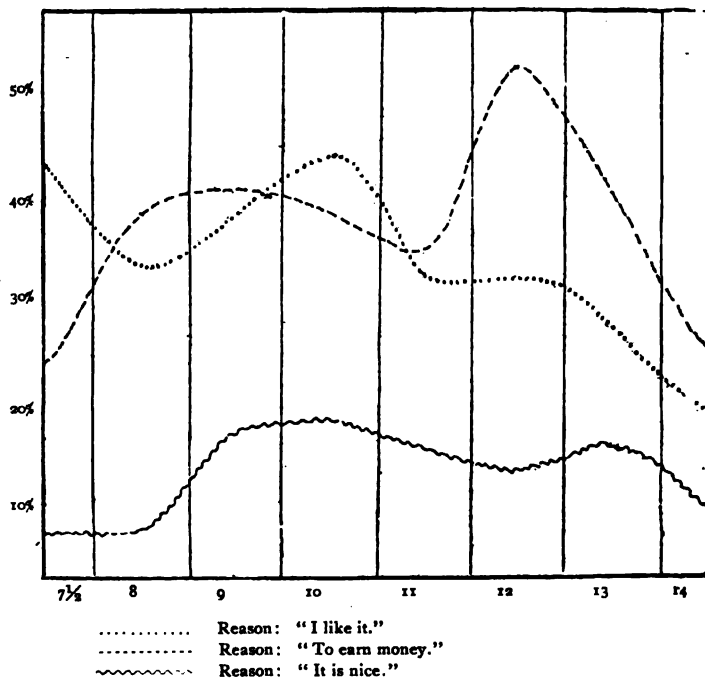
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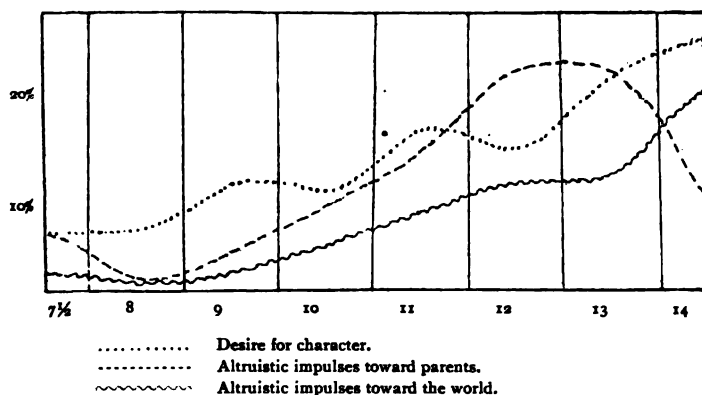
IV.



V.



VI.



THE RESULT OF CHILD STUDY IN COUNTRY SCHOOLS.

BY MISS ANNA K. EGGLESTON, BUFFALO, N. Y.

Professor Thurber's selection of a theme for the introductory work of child study in this state has proven a most happy one. Nothing could have served the purpose better, if as well, than the question, "What I Want to do When I am a Man or a Woman, and Why?"

The papers written by the children as well as the comments made by the teachers have shown this. To some it was highly ridiculous to think of presenting so scientific a topic as child study to the average teacher of country schools, while others said teachers of children ought to be students of children, and there must be some point for a beginning, so simple that it will awaken intelligent interest. "Children's hopes" has proven to be that simple beginning. The first general interest in child study among country and town teachers was awakened by means of stories, for, as Miss Wiltse has said, "The story is the common ground upon which the educated and uneducated can meet in perfect sympathy." These stories were taken mainly from a teacher's experience in the schoolroom, and were used to illustrate the management of children by those who saw the real meaning of children's words and acts, and the crime that is committed upon child-nature by those who do not look beneath the surface, but act upon assumed knowledge.

One story had for its purpose a warning to teachers who were

earnest students of text-books, and methods of teaching, and who worked hard for class records, but were unmindful of the training of individuals. Examples were given showing the desire which teachers sometimes have to rid themselves of the perplexing problems in the development of human life; their effort to crowd out of schools or into lower grades children who are difficult to subordinate to school regulations; and the unwillingness which teachers often manifest to study these children that they may understand their special needs. Child study may yet make practical that idea which floats about in educational spheres, that the school is made for the child and not the child for the school. That idea sometime may light somewhere.

The following story has done more to cause teachers to think of the full significance of reporting children to superior officers for correction than would the clearest statement of the theory which condemns the practice:

A little boy was talking with his mother about the goodness and beauty of heaven, when his mother said, "I do not know what God would do with a little boy in heaven who was as naughty as you were a little while ago?" Without a moment's hesitation the child replied, "Why, He'd send me down to Smith." Smith stands for the name of the principal of the school which the boy attended.

Stories illustrating the peculiarities of various types of children and mistakes made in dealing with them have caused teachers to relate experiences from their own schools. "I have a boy in my school just like your John," is the often repeated statement at the close of the "John story," and many times teachers have returned to the seemingly incorrigible pupil with a little element of faith in a new way of managing him, and faith is the first stepping-stone to success. The reports given by teachers of these special cases at the end of the year have been most encouraging.

After giving a brief history of the child study movement, and suggestions regarding literature upon the subject, the plan for the study of "children's hopes" was submitted, and teachers were invited to take part in the work if they were inclined to do so. The response indicates a deep and widespread interest. The delightful freedom with which pupils and teachers have written is due largely to the simplicity of Professor Thurber's plan. It is suggestive, but not formal; there are no blanks to fill.

The results which have come from this direction, "If the children have paper of different kinds and sizes let them use it," would doubtless bring cold chills and nervous prostration to the lovers of uniform size, quality, and folding of class papers from which they would find difficulty to recover sufficiently to see the merits of the thoughts

inclosed. But if we keep delving into childhood's realm we may yet be induced to see some meaning in our pet saying, "We learn to do by doing." These papers from district schools show that children have selected the paper they wished to use, folded them as they chose, put little characteristic marks upon them, in fact, have really been permitted to act, as well as write, their thoughts.

Children often write as if it were the first time they had ever been let loose with a question, and, freed from the restrictions of complete statements and technical forms, thought predominates. It is exceedingly interesting to trace the influences out of which these hopes were born, and frequently the dominating spirit of the school is plainly indicated in the papers. Sometimes certain sentiments pervade an entire school. One set of papers was full of ideas of truth, honor, and goodness. Each child had marked upon his paper the words "Honor Bright."

From some schools the pupils expressed a desire to work for others—care for the sick, the poor, the aged. One girl wishes to become a trained nurse, another a missionary. Side by side with these hopes come those from other schools where vocations are chosen because, as the children write, "you can get some money." The effect of campmeetings and Christian Endeavor societies are seemingly easy to trace; the country fair and the circus are not without their influence.

As soon as these papers have been read a letter is written to the teacher asking her to give reasons as far as possible for the children's statements. The purpose of this is to confirm or modify an opinion which the examiner of the papers has formed, and also to awaken a spirit of investigation on the part of the teacher.

The teacher whose children's papers were marked "Honor Bright," was asked the significance of these words to the children. She was also questioned regarding her methods of moral instruction. Another teacher was asked to tell why a certain boy had written so much about a gun and made a drawing of one at the head of his paper. In the answering of these questions many teachers have shown not only an interest, but also an ability to do valuable work in child study. One teacher has written at the close of each child's paper the special characteristics of the child. For instance, a little girl of thirteen years writes, "I would like to go to Holland and Switzerland and see the beautiful scenery, and be able to draw people's pictures and paint beautiful landscapes." The teacher has written, "A bookworm, studies nature, too. Very quick to learn; nervous, artistic turn; away ahead in drawing, and has a great fondness for it; parents farmers."

To those who are accustomed to read school records in per cent. this may seem of little value, but this evidence of the teacher's

thoughtful consideration of every pupil under her care means to many better teaching than can ever be put into per cent. language.

Some interesting studies of children, too young to be in school, have been sent in by country teachers, while others have written most interestingly of their own childhood.

While the work of this state at present is not being done by means of an organized body of students, it is possible that these individual workers will form themselves into an organization when their independent work gives them something to bring to such an association. From the material at hand many plans suggest themselves for the future.

The results of child study in the country are still too youthful to definitely fix upon certainties, but there are indications which point to possible conditions that will form the foundation of better things in rural schools.

The present value of the work lies in the number of suggestions which it gives for future plans; the new vision that has come to the teachers, and the number of excellent centers of work that it seems possible to establish in the state through this knowledge which has been gained of reliable and sympathetic students of children.

The introduction of a personal theme into the school has emphasized the educative power of those experiences upon which even childish hopes for the future are based. Conversation upon a subject closely allied to life breaks through the hard crust of text-book topics that so seldom touch real life. Teachers see their pupils under new conditions, the light of truth begins to dawn that "school is for life" and not simply a cold storage for facts. Teachers write of themselves, and going back into their own childhood experiences, they awaken chords of sympathy with child-life, the vibrations of which must touch the individuals of their schools.

Everywhere, teachers from little, plain, district schools look out upon great educational institutions and feel that their own work is comparatively insignificant. The people of these towns give so little support and encouragement, what wonder that workers lose heart and deem their efforts failures? Is it strange that out of their lives dies that power which teachers must have to inspire pupils with a desire to fit themselves for the highest possibilities of life? To know that the state superintendent of education is interested in the hopes of the children in district schools and sees an educational value in them, brings new courage and a higher appreciation of their labors to many who have grown disheartened in teaching in these schools. Personal letters to the state superintendent have shown how much this is to teachers, and we have another result of child study in country schools.

SOME MUSICAL PHASES OF CHILD STUDY.

BY MISS FLORENCE MARSH, DETROIT, MICH.

[AN ABSTRACT BY THE AUTHOR.]

The data used in this paper refer to No. IV. of the Clark University syllabus entitled "Early Musical Manifestation," compiled by G. Stanley Hall and Florence Marsh. The number in question deals with the preference of the child in music.

Lest any child should be tempted to vote for a song he might think favored by his teacher, he was cautioned to name "the one song he liked best in all the world," regardless of what it was or where he had heard it. The youngest children whispered the title, the others wrote it. The parent's nationality was noted, also the year or grade of school life. The votes of 6,330 children were tabulated under the general division "boys" or "girls," and these subdivided under the headings "school," "Sunday-school," "patriotic," "street" and "home" songs.

BOYS.						GIRLS.						BOYS AND GIRLS.					
YEAR.	School.	Sun. S.	Patriot.	Street.	Home.	YEAR.	School.	Sun. S.	Patriot.	Street.	Home.	YEAR.	School.	Sun. S.	Patriot.	Street.	Home.
I.	44	10	26	9	9	I.	46	15	20	6	11	I.	50	13	23	8	10
II.	39	11	29	9	10	II.	43	20	15	6	11	II.	42	16	23	8	11
III.	29	8	38	14	10	III.	39	11	25	8	15	III.	34	9	31	11	12
IV.	12	10	42	21	12	IV.	26	18	28	12	14	IV.	19	14	35	16	13
V.	7	11	50	18	11	V.	12	15	32	15	24	V.	9	13	41	17	18
VI.	6	4	50	17	21	VI.	9	9	38	17	26	VI.	7	7	43	17	24
VII.	11	10	48	20	10	VII.	13	19	28	21	17	VII.	12	15	37	21	14
VIII.	9	8	60	9	14	VIII.	16	22	32	2	26	VIII.	13	16	44	5	21
IX.	3	1	58	9	26	IX.	3	1	51	7	35	IX.	3	2	59	9	27
X.	3	0	65	5	25	X.	1	10	47	4	38	X.	2	7	53	5	33
XI.	1	7	68	8	14	XI.	1	3	41	5	50	XI.	1	5	51	6	47
XII.	0	16	25	33	25	XII.	0	29	27	0	44	XII.	0	26	26	7	41

As the love of country is fostered, and the study of history taken up, the choice of school songs decreases and that of patriotic songs increases. With boys the vote from the first to the twelfth year of school runs as follows: School songs decrease, according to per cents. in this order, 44, 39, 29, 12, 7, 6, 11, 9, 3, 3, 1, 0; while patriotic songs run 26, 29, 38, 42, 50, 48, 60, 58, 65, 68, 25. Both Sunday-school and street songs gradually decrease until in the last year of the high school they receive fresh impetus. The songs of the home receive an even vote throughout the grades.

With the girls, the same decrease in school songs and increase in

patriotic songs is noted. Music, at present, is not included in the high school curriculum, owing to the cramped quarters in which the school has been temporarily located, and possibly this may affect the vote as to school songs.

Comparing the votes of both sexes, a marked preference is shown by the girls over the boys for songs of home and sentiment, as well as for sacred music. This tendency is noticeable in the first year, when for Sunday-school songs the girls vote 15 per cent. to the boys 10 per cent., and for home songs 11 per cent. to the boys 9 per cent.

Among the high school students a strong love of folk-songs is noticed, many German children voting for Auld Lang Syne, Annie Laurie, Robin Adair, and other Scotch songs. In sacred music the choice was excellent, a knowledge of the composer being frequently shown. The effect of our recent seasons of German and Italian opera is very apparent; a strong plea for increased opportunity in this line. Of American composers, De Koven seems to be the favorite; Robin Hood and Rob Roy being frequently mentioned, while "Oh Promise Me" is often the choice of the maidens in the eleventh and twelfth grades.

In regard to other points on the syllabus, chiefly those referring to devices successfully used in stimulating the time and tune senses, returns have been received that will, no doubt, aid in coping with these difficulties and also in overcoming them with what might be called musical games. These devices, it is hoped, will do away with much of the drudgery connected with technical music, and at the same time foster the real musical feeling in the child.

After all, the true exponent of music in the public schools must adopt an eclectic school, based on the most catholic principles if he is to do the most good, and his watchword must ever be "The best for the child."

DEPARTMENT OF PHYSICAL EDUCATION.

SECRETARY'S MINUTES.

FIRST SESSION.—CONCERT HALL, BUFFALO, N. Y., JULY 8, 1896.

The opening session of this department was called to order at 2:30 p. m., by the President, Miss R. Anna Morris, Supervisor of Physical Training, Cleveland, Ohio.

A class in Swedish gymnastics was directed by Miss Adella F. Fay, Supervisor of Physical Training, Buffalo, N. Y.

The President, Miss Morris, followed with a suggestive opening address.

Dr. Nicholas Murray Butler, Columbia University, New York City, gave an address on the motto of the department, "The Life of Man in Every Part Has Need of Harmony and Rhythm."

Dr. J. H. Kellogg, of the Sanitarium, Battle Creek, Mich., read a paper on "Physical Deterioration Resulting from School Life; Cause; Remedy." Discussion by Dr. W. G. Anderson, Yale University.

Professor James L. Hughes, Inspector of Schools, Toronto, Ontario, followed with an address on "Physical Training as a Factor in Character Building." The discussion was led by Buel T. Davis, Superintendent of Schools, Winona, Minn.

The following committees were appointed:

On Resolutions: Professor W. D. Friedberg, Principal Grammar School, New York City; Madame Mankell, Buffalo, N. Y.; Miss Rebecca Stoneroad, Washington, D. C.; Dr. E. H. Arnold, Yale University; Miss Adella F. Fay, Buffalo, N. Y.

On Nominations: Superintendent Buel T. Davis, Winona, Minn.; Miss Emily A. Rice, Ocean Grove, N. J.; Mrs. Anna M. P. Tucker, Cleveland, O.; Dr. J. W. Seaver, Yale University; Mrs. Frances W. Leiter, Mansfield, Ohio.

The department adjourned until Thursday, July 9th, 2:30 p. m.

SECOND SESSION.—BUFFALO, N. Y., JULY 9TH, 2:30 P. M.

The session opened in Concert Hall with an exhibition of class exercises in eclectic gymnastics directed by Miss Annie M. Summerville, High School, Buffalo, N. Y.

Dr. G. Stanley Hall, Clark University, Worcester, Mass., was introduced by the President, and gave an address on "Educational Value of Body Culture."

Dr. D. A. Sargent, Hemenway Gymnasium, Harvard College, Cambridge, Mass., was then introduced and addressed the department on the question "Should We Have Military Training in the Schools?" Discussion followed by Mrs. Frances W. Leiter, Superintendent Physical Culture Department, W. C. T. U., Mansfield, Ohio, and by J. N. Wilkinson, State Normal School, Emporia Kan.

Dr. Mara L. Pratt, Medical Director, Durant Gymnasium, Boston, Mass., read a paper on "The Nervous Force of the Teacher."

The Committee on Resolutions reported the following:

1. *Resolved*, That we are glad to record the growing recognition that physical training has received during the past year, which has been one of general educational activity.
2. *Resolved*, That we enlist the interest and support of school authorities to the end that physical training be adopted as a co-ordinate branch of instruction in the public schools of the country.
3. *Resolved*, That we urge the training of teachers in this line, and that physical training be a required branch in the preparation of the teacher.

Aside from the resolutions as given above, the committee desired to present the following:

Resolved, That we hereby express our thanks to the local committee for the excellent manner in which all arrangements were made for the reception and entertainment of this department; also that a copy of this resolution be sent to the chairman of the local committee and to the local papers.

E. H. ARNOLD,
NATHALIE MANKELL,
REBECCA STONEROD,
ADELLA F. FAY,
W. B. FRIEDBERG.

Committee on Resolutions.

The Committee on Nominations presented the following report:

For President—Miss R. Anna Morris, Cleveland, Ohio.

For Vice President—Professor J. N. Wilkinson, Emporia, Kan.

For Secretary—Dr. H. B. Boice, Trenton, N. J.

On motion the report was unanimously received and the above-named candidates were elected by acclamation.

A hearty vote of thanks was extended to the President, Miss Morris, and the Secretary, Miss Kimberlin, for their admirable work in the past year in the arrangement and presentation of the excellent programme which has just closed this department for 1896.

On motion the department adjourned.

N. D. KIMBERLIN, *Secretary*.

PAPERS AND DISCUSSIONS.

PRESIDENT'S ADDRESS—THE PURPOSE OF THE DEPARTMENT AND THE STATUS OF PHYSI- CAL TRAINING.

BY R. ANNA MORRIS, CLEVELAND, OHIO.

My greatest privilege this afternoon will be to direct the programme and present our eminent speakers, yet I cannot refrain from personally addressing you on the purpose of the department and the *status* of physical education in this country.

The organization of this department at Denver last year was but the natural result of the advancement in educational progress. The tide of reform, in its demand for strength, united this craft with the educational fleet for a purpose. The physical is necessary to carry along the intellectual, just as the sturdy little tugboat is needed to pull the high-rigged, beautiful ships through rugged seas. The success in individual life, and the stability of a nation depends as much upon physical strength as upon intellectual force. It is now conceded that no system of education is complete unless it provides for the development of the physical powers. The outspoken verdict of the Committee of Fifteen at the Superintendent's Convention in Cleveland was most significant. This association stands as the great administrative body of our educational world, and its verdicts are supposed to be the result of practical experience and are universally recognized as such in educational circles. In the report on the correlation of studies the committee advanced physical training to the dignity of a co-ordinate branch of education, giving it equal rank with music and drawing. Unless we are greatly mistaken, this stands on record as the most pronounced recognition that physical education has received in this country from a general body of educators.

The report reads as follows: •

"In regard to physical training we agreed that there should be some form of daily exercises, amounting in the aggregate to one hour each week, the same to include the main features of calisthenics, and German, Swedish, or American systems of physical training, but not to be regarded as a substitute for the old-fashioned recess, established to permit the free exercise of the pupils in the open air. Systematic physical training has for its object rather the

will training than recreation, and this must not be forgotten. To go from a hard lesson to a series of calisthenic exercises is to go from one kind of will training to another. Exhaustion of the will should be followed by the caprice and will freedom of the recess. But systematic physical exercise has its sufficient reason in its aid to a graceful use of the limbs, its development of muscles that are left unused or rudimentary unless called forth by special training, and for the help it gives to the teacher in the way of school discipline. Your committee would mention in this connection instructions in morals and manners which ought to be given in a brief series of lessons each year with a view to build up in the mind a theory of the conventionality of polite and pure minded society."

Through the action of the executive at Denver last year, this department has become a part of the national plan of education, with the school interest of sanitation, health, hygiene and recreation in view. To us the other departments will look for plans and suggestions which will furnish relief from the physical deterioration which characterizes the school life. To us they will look for ways and means by which to bring about a more alert, healthy, self-controlled and self-possessed condition of physical existence in the schoolroom. The general aim of the department is to advance the subject of physical training along educational lines, basing it upon pedagogical, physiological and psychological principles; to awaken a more intelligent interest and a more adequate conception of the importance of the work; to enlist the support of leading educators; to bring the subject more effectually before the regular teachers, and to establish a closer relation between those actively engaged in physical training. At this, our opening meeting, we have tried to start on the broad basis of investigation. We have called to our aid physicians, sanitarium and educational authorities, philosophers and scientists, who will give us an all-around treatment of the subject of physical education as seen from different standpoints. Physical training cannot be isolated from other necessary branches of education; it must be brought into harmony and correlation with the great educational curriculum. We hear much about the correlation of mental studies which form a machinery of development that rounds out the mental faculties. Now, when we unite to this accumulated brain mass the basis of physical correlation, we fit the entire child for life and put the whole thing in harmonious working order. We correlate correlation.

Child study starts its course by considering first, the physical characteristics of the child. It is supreme wisdom to begin life's education with a refining care of the body. This not only lays a good foundation for health in maturer years, but opens up the avenues to learn-

ing itself. Everything we know comes to us through the medium of the five physical senses—seeing, hearing, smelling, feeling and tasting. These senses are perfect or imperfect in the degree in which the organism and condition of the nerves and muscles which bear them are perfect or imperfect. The *summum bonum* of physical education is the realization of self. Whatever success has attended educational effort in the past has been due to the direct or indirect study of human nature—the study of self.

In reviewing the status of physical training in our country, it is not necessary to longer plead its intrinsic value—that is proven by existing conditions. The last twelve months have shown a widespread interest in training for the body, a large increase in the formation of clubs for exercise, and renewed zeal on the part of all engaged in this work as instructors. Scores of gymnasiums have been built, and many for the physical development of women; the Y. M. C. A. has brought its physical department to the highest prominence and made it co-ordinate with its moral and religious work. •

The American Association for the Advancement of Physical Education, organized in the year 1885, by its last meeting brought its forces into a closer and more compact union. It is now constituted on a plan that will extend the sphere of its usefulness to all parts of the United States. It numbers among its zealous and active members workers in diverse though related fields of endeavor, including instructors in private, public, and college university schools. The recognition of physical training as the child of education has been most pronounced during the past year.

The normal schools of physical training are doing most excellent work on the practical and theoretical plan, with courses that include the study of anatomy, physiology, antropometry, medical gymnastics and the execution of practical work. The Sargent, The Anderson, The Oberlin, and the Boston, special schools, are sending out large numbers of students who are, by their work, showing how the brain may be built by improving the body.

I maintain that there should be increased facilities for physical training in state normal schools, and that the regular teachers should be led to at least an intelligent appreciation of body culture. They are the guardians of public health. Any teacher ought to be able to give a pretty fair diagnosis, mentally, morally and physically, of a child under his care.

Cook County Normal, among other excellent things which it has done, has placed physical training on an equal rank with other branches. A few other schools have done the same.

I cannot even suggest in this paper the broad work that is being

done in the public schools. Almost every city has introduced some form of gymnastics into its course of study.

Chicago has set a good example for public high schools. We read that "The city has recently erected at Hyde Park a new high school, fully equipped with every modern idea in educational progress. Its new gymnasium will stand as a model for high school gymnasiums. It is on the ground floor, two stories high, and so situated that the noise necessary to gymnastic exercise will not disturb or annoy any other room in use in the building. Here, from 9 a. m. to 2 p. m. daily, boys and girls exercise together. No set dress is required, though many of the young girls, indeed, the majority, come in loose costume suitable for a gymnasium. After the close of school, exercise is taken voluntarily, and under supervision, and to demonstrate the popularity of the gymnasium it is only necessary to say that the instructor has not an idle second until 5 o'clock.

The National W. C. T. U. society has been making an organized effort along the line of physical advancement. It sees in body building, a protection against vice. In its efforts to help the people to become more abstaining, it recognizes in this training an uplifting of the low physical condition, which so easily yields to appetite.

Financially physical training has not received a just consideration. The instructors as yet do not receive compensation comparatively equal to that given instructors in other branches. Only in Boston, where physical education takes the highest rank, does the director receive an adequate compensation for his labor. As an average, \$1,000 is the salary paid directors in the larger cities, while in small places they receive from \$600 to \$700. These are beggarly prices, indeed, for those who must stand the wear and tear of supervisory life. With a more intelligent appreciation of the subject there will begin a better remuneration. When it is fully realized that the teacher of physical training is really an educator, and not just going through the motions, he will receive the financial consideration due him.

We have people in our profession of whom as educators we may justly be proud. I will not speak of the living, but I may be permitted to say of one who gave his life to the work that he was a broad man in his acceptance of the elements of truth and strength. He had an influence upon the whole subject of physical training in the United States and England. His text-books upon gymnastics stand on a par with any work for pure intellectual advancement. We have not a large literature, but we are proud to note that it is growing and that recently a few books and many excellent articles have been published. Our special journals *Mind and Body*, *Good Health*, *Physical Education*,

The Posse Journal and *Werner's Magazine* are doing much to advance the cause.

Probably the most important contribution to gymnastic literature recently is the report of the Commissioner of Education, Dr. W. T. Harris. Dr. Harris devotes the latter part of his own article in this report to physical training, and criticises the present method. He says "I am not convinced that the present theory of physical education as taught in the schools gives much weight to the bodily conditions that favor the restoration of nervous energy." This is the keynote of his whole article, and certainly it is an important consideration. We must conserve our forces and build up the body into nobility of life. Let us in our work consider the child as a unit, to be developed, morally mentally, and physically. Let us plan for the physical up-building, and, as we follow nature, "Work enough to watch the Master work, and catch hints of the proper craft, tricks of the tools, true play."

PHYSICAL DETERIORATION RESULTING FROM SCHOOL LIFE; CAUSE; REMEDY.

BY J. H. KELLOGG, M. D., BATTLE CREEK, MICHIGAN.

Some years ago, while spending a short time among the Yuma Indians, in the vicinity of Old Fort Yuma, Arizona, I observed, one morning, a considerable number of old warriors and chiefs gathering in from the forest, and collecting in the old fort. Upon inquiry I found there was to be an Indian school meeting, the first one ever held among the Yumas.

The school had been started some two years before by Sister Alphonse, and two or three other devoted Catholic sisters, who had ventured into the wilds of Arizona to undertake the experiment of educating the Yuma boys and girls. But their school had not prospered. The children had been kindly treated; they had been supplied with an abundance of food, whereas before they were often hungry; they had been furnished with clothing, including hats, bonnets, shoes and stockings, whereas before they had roamed the forest in nakedness. The schools were furnished with all the necessary modern appliances, and the teachers labored earnestly in behalf of the students.

Nevertheless, Sister Alphonse confessed to me that the school was not a success, and that the old Indians were very much opposed to it. I inquired the reason for their opposition, and was told that the

Indians complained that going to school did not agree with the health of their children; that after having been in school a few months, they were far less robust and vigorous than before, and that they suffered from indigestion, catarrh and other diseases, from which they were before as free as the birds, the antelopes, and the prairie dogs among which they lived. The good sisters honestly admitted that the complaint of the old Indians was not without foundation, and that it was true that for some reason the little wild children of the forest began to lose their vigor and vivacity soon after entering school, and therefore some of the most sagacious parents had kept their children at home.

The school meeting had been called for the purpose of presenting to the old Indians the advantages of an education, so as to convince them, if possible, that the children would better have an education even if the getting of it should spoil their stomachs, weaken their lungs, destroy their keen sense of smell through catarrh, impair their eyesight, dull their hearing, and deprive them of the hardihood which had enabled them for centuries to maintain the independence which they still possessed. I did not remain to hear the conclusion of the matter, but a few years later, in passing through the country on a visit to the Pacific Coast, I spent a day among the same Indians. I found the school flourishing to the great delight of the good sisters, but the children perishing. Their forest air of rollicking freedom had disappeared, and the evidences of physical depression and deterioration were unmistakably apparent. Civilization had conquered, and the Indians had become convinced that their children must be educated, even at the expense of health and vigor.

The deteriorating influence of school life upon children has been so long and so generally recognized that I do not need to undertake the demonstration of the reality of this stupendous evil, nor to cite the abundant statistics collected by various workers in this country, England, Germany, and Russia, which show so graphically the enormous proportions which the evil has assumed.

Until the recent development of gymnastics in connection with our colleges, seminaries, and, to some extent, the public schools, to be a scholar, a cultivated man or woman, meant almost universally to be a chronic invalid. The man or woman of letters is still generally pictured as a person of rather attenuated form, pale countenance, hollow eyes, lax muscles, and if not nervous or hysterical, escaping those dismal afflictions only by virtue of extraordinary force of character or especially favorable environment.

I think, however, there are good grounds for believing that the aristocracy of dyspeptic *literati* is diminishing in numbers, thanks to

the influence of the bicycle, college athletics, the growth of more sturdy ideas relating to education in general, and the scores of missionaries sent out into different parts of the country by the Chautauqua School of Physical Culture, and allied institutions.

It is still true, however, that the majority of persons engaged in the educational training of children and youth have little appreciation of the importance of giving attention to the physical condition of their pupils as well as to their mental and moral training. If the conditions of school life were properly related to the health of the children, the school period would be the most regular and healthful of the whole life. Childhood is not burdened with perplexing cares and anxieties, nor subjected to trying emergencies, as is mature life, and the perfect regulation of the child's life at school should be in the highest degree conducive to normal and healthful activity. But that this is not the case under existing conditions is everywhere recognized. The annual vacation is itself a confession of the unhealthful and exhausting character of school work. Exhausting work is by no means favorable to the best development. The permanent results of school training depend upon tissue changes in the brain structure which, in turn, depend upon digestion, circulation, and the various nutritive processes of the body. Hence sound health and the proper performance of all the bodily functions are the conditions most essential to a sound education.

This question is one of the most important which could possibly be considered by the great body of educators gathered in this city today, and of such superlative importance is it that every other question might profitably be laid aside, and the entire time of this great convention devoted to the consideration of the causes which make the school life unhealthful and exhausting, and of the remedies required.

I shall not, however, in this brief paper undertake to deal with the almost numberless phases of the subject which has been assigned to me, especially as branches of this great question have been ably and comprehensively considered by various writers whose works may be readily consulted. I wish especially to place before this association for earnest consideration a single phase of the subject which quite extensive observation leads me to believe has been to a large extent ignored. My paper will deal chiefly with the injurious effects of incorrect postures in sitting and standing, in the development of displacements of the internal viscera and the long train of evils arising therefrom.

The displacement of the internal viscera, particularly prolapse of the stomach, prolapsed or floating kidney, prolapse of the bowels, and displacement of other viscera, is a morbid condition the existence and

significance of which have been recognized only in comparatively very recent times.

Much has been written with reference to the influence of wrong positions in sitting, in the production of spinal curvature, flat chests, and other deformities which are externally visible; but, so far as I know, little or no attention has been given to the relation of incorrect posture to internal displacements. My own attention was called to the importance of the relation of these displacements to the general health by the writings of Glenard and Pasteur, two eminent French

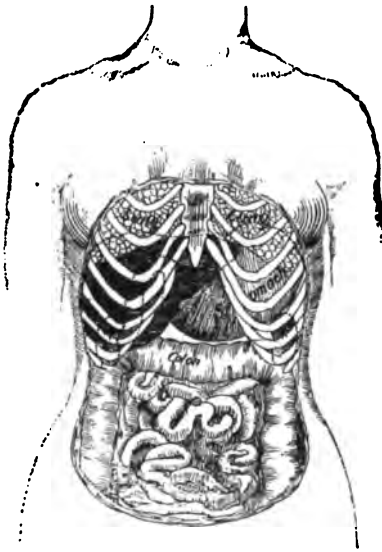


Fig. 1. A Normal Figure.

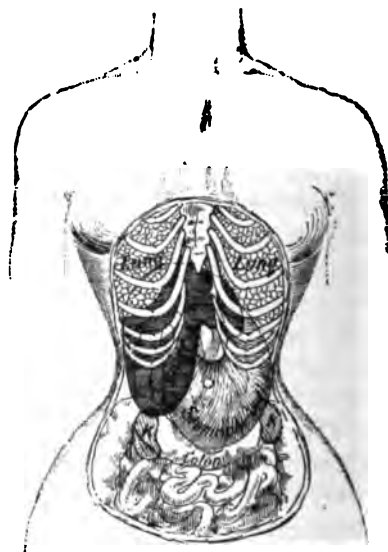


Fig. 2. Stomach and other Viscera Displaced.

physicians who, twelve or fourteen years ago, began to address the profession upon this subject. Glenard pointed out that with the great majority of persons suffering from chronic indigestion, prolapse of the stomach or bowels, or both, is the fundamental cause of the disease, and showed that many dyspeptics may be cured by the simple application of a bandage for the support of the prolapsed organ. Professor Bouchard, the eminent French pathologist, later pointed out the fact that Bright's disease of the kidneys, rheumatism, pulmonary consumption, and other chronic maladies, are traceable to the same cause, the foundation for these diseases being laid in indigestion resulting from displacement of the digestive organs.

Something more than six years ago I began a careful study of this subject, and soon noted a very distinct relation between displaced conditions of the internal organs and the external form of the body.

In order to make my observations more exact, I devised an instrument by which a profile of the entire body could be quickly made, and began to make tracings of my patients in connection with the physical examination, with reference to the location of the principal viscera of

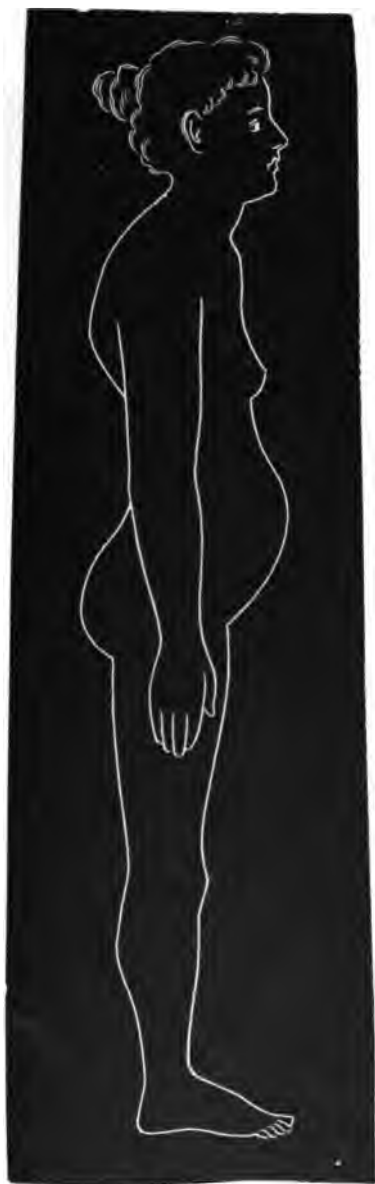


Fig. 3. Result of Relaxed Sitting.

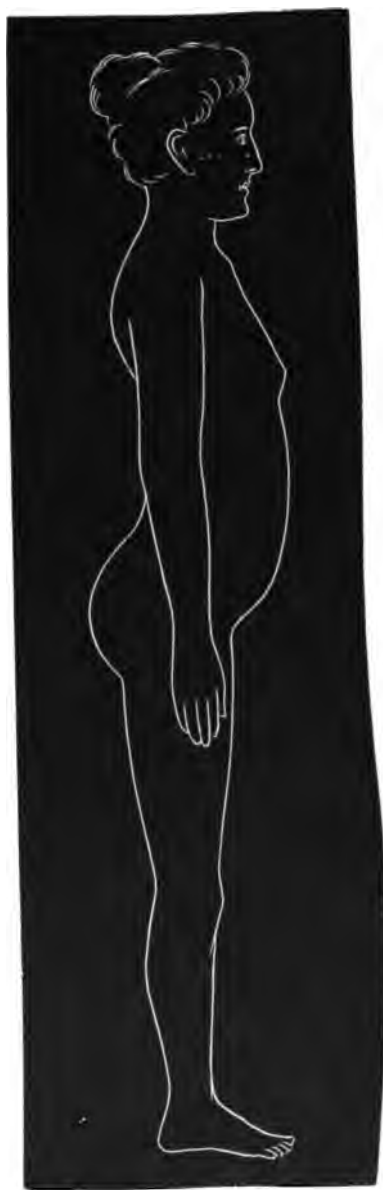


Fig. 4. Same Person as shown in Fig. 3, with Posture Deformity Corrected.

the trunk. I made in this way many hundreds of tracings, until I fully established the facts to which I wish especially to call attention, and which I will also demonstrate by copies of the typical forms of internal and external deformities which I have observed. The accompanying cuts will illustrate some of these deformities. (Figs. 1—4.)

Although I have found these deformities present in both men and women, they have been of very much more frequent occurrence in



Fig. 5a. A Spleen Displaced from Corset Wearing.

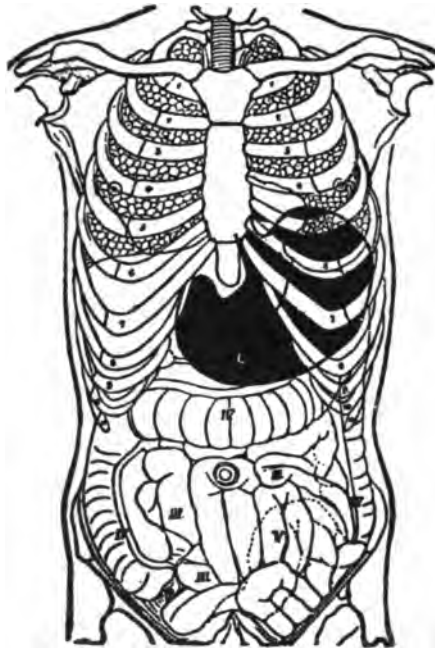


Fig. 5b. Front View of Same Person.

women, a fact which I have attributed to the unhealthful features of the conventional mode of dress, and to the weaker physical development of woman. Nevertheless, I have found displacements of the viscera associated with certain external deformities, in a large number of both men and women who had never injured themselves by constriction of the waist, and have, I believe, been able to trace them directly to improper attitudes in sitting. In the great majority of cases of the latter class patients have not been aware of the internal deformities existing in the form of a prolapsed stomach, floating kid-

ney, or prolapsed bowels until I have called attention to the fact by a careful physical exploration, whereby the location of the stomach, kidneys and other viscera may be exactly determined.

From a careful study of the health of these cases, I have become convinced that in the majority of instances the foundation of these defects is laid in childhood, and during the school-going period. But before making further remarks of a general character, I wish to call



more particular attention to the exact nature of the evil which I am endeavoring to discuss.

The trunk is practically divided into two cavities. The division of the lower cavity into pelvis and abdomen is an artificial and not an anatomical subdivision, being useful for the purposes of description, but misleading and confusing unless ignored in studies concerning causation and pathological relations. Anatomically, the trunk is divided by the diaphragm into two cavities only, the upper containing the chief organs of respiration and circulation, and the lower containing the principal organs of digestion and the genito-urinary apparatus. The chief anatomical facts which I desire to have kept in mind are the normal position of each of the viscera which occupy the lower cavity of the trunk, and the mode by which these various organs are held in place. It will be remembered that the liver, spleen, pancreas,

and stomach are all located above the diaphragm, or at the waist, as shown in the accompanying diagram after Ziemssen.

The transverse colon lies at the waist line, the point of junction of the ascending and transverse colon on the right side dropping a little below the line, while the point of conjunction of the transverse with the ascending colon at the left side rises considerably above the waist line, being held in place by the pleuro-colic fold of the mesocolon. The kidneys lie just at the waist. The greater portion of the space below the waist is occupied by the intestines and the bladder. It is noticeable that the organs of the greatest weight and functional importance are located at or above the waist.

How are these important organs held in position? Although fitted together with the nicety of an articulation, the viscera are certainly not held together by anything corresponding to the firm ligamentous bands which unite the osseous elements of the joint. The so-called ligaments which hold in place the liver, stomach, spleen, and bowels cannot properly be called ligaments, as very little ligamentous structure enters into their composition. The same may be said of the ligaments which are supposed to support the organs of the pelvis.

The organs are held in position by the muscular walls of the abdomen and the support of the adjacent organs, as all are fitted snugly together like the various articles contained within a well-packed trunk.

The liver and kidneys, and the greater portion of the stomach, when in their proper positions, are almost entirely covered at the front of the body by the ribs. The abdominal muscles, which constitute the chief support of these organs, are joined to the ribs above, and to the upper border of the pelvic bone below. It will readily be seen that in bending forward the two points at which these are attached, the ribs above and the pelvis below, are brought nearer together, consequently the abdominal muscles are relaxed and the natural support of the organs of the trunk is removed. At the same time, in bending forward, the lower ribs approach the spinal column, thereby forcing downward the organs which lie beneath them, namely, the liver, kidneys, and stomach. These in turn, crowd down the colon, intestines, and other organs which underlie them. Thus we have two causes operating together to produce displacement of the organs which lie at the upper part of the trunk—an abnormal pressure above, and the removal of the natural support below.

A glance at the accompanying Figure 1 will show at once the relation of the ribs to the liver, stomach, and kidneys. It should be recollected, also, that the spleen and pancreas lie beneath the ribs as well as the organs before named.

In a person whose figure shows a normal outline, as in the accompanying figure (Fig. 6) that of a German peasant woman, it is noticed that there is a strong anterior curve of the spine, a full chest, and that the abdominal muscles are well drawn up. A lessening of the posterior



Fig. 6.

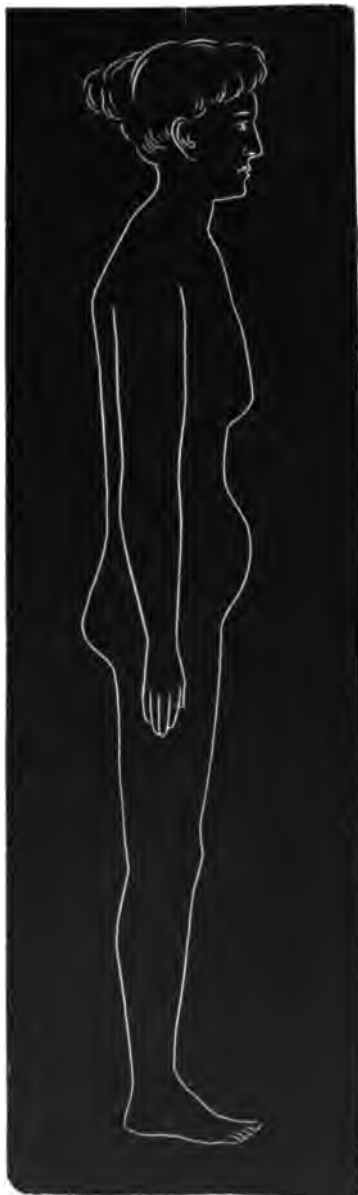


Fig 7.

curve of the trunk results at once in a depression of the chest and waist, and produces an abnormal fullness in the lower abdomen, the natural consequence of the displacement of the organs lying about the waist, downward, and a forward bulging of the abdominal walls. This is well shown in figure 7, the outline of a seamstress, who, in her occupation has acquired the habit of sitting in a relaxed position, bending forward over her work.

It thus at once appears that when the student sits at his desk in the schoolroom, leaning forward over his book or work, there is not only danger of acquiring a curvature of the spine and a correspondingly ugly shape, but there is an actual compression and displacement of internal organs which, if the morbid condition becomes permanent, will, as the result of habit, produce serious diseases, and cripple the individual for life.

We see a vast multitude of such cripples going about the world, persons whose round shoulders, flat chests, forward carriage of the head, and abnormally straight spine, indicate prolapsed and disordered stomachs, livers, kidneys, and bowels.

Not only are the organs within crippled in their action by the stooped position in sitting, walking, and standing, but the lungs are likewise hampered. On having a round-shouldered, flat-chested person breathe into a spirometer after a full breath, I have found the lung capacity to be only 270, whereas the same person standing in a proper position was able to expel 310 inches after taking a full inspiration, an increase of 15 per cent.

The involuntary respiration must be interfered with to an even greater extent. The person breathing in a stooped, sitting position is constantly in a state of air-starvation, a fact which is evidenced by the disposition to straighten up and draw a long, deep breath every now and then, which is constantly noticed in persons who habitually sit at study or work in a stooped attitude.

The physical injury which a person receives from an incorrect sitting posture is of far greater consequence than the mere ugliness of the appearance. The posterior curvature, or abnormal straightening of the spine, resulting from an improper sitting position, is the most common of all forms of spinal curvature, but singularly enough, is not mentioned even in special medical treatises. Round shoulders, and flat, hollow chests are considered, but nothing is said of posterior curvature of the spine. By studying this matter closely, we find posterior curvature present in all these cases, if not the cause of the condition. Every round-shouldered person, every flat-chested person, has posterior curvature of the spine.

There are three forms of posterior curvature:

1. That which affects the upper part of the spine, causing the head to be thrust forward over the chest. There is extreme roundness of the shoulders, and the hips are carried back. This form is most common in aged people, and in laboring men who have to bend over their work.

2. That form which affects the middle portion of the spine. In these cases the head and hips are both thrown forward. This form is found in young and middle-aged people, and is usually due to bad positions assumed in sitting and standing, and a lack of development of the muscles of the trunk.

3. That in which the lower, or lumbar, region of the spine is affected. In these cases the forward curve is effaced, or nearly so, the spine becoming straight. The hips are nearly on a line with the spine, giving a most ungraceful figure.

Incorrect sitting may result either from defects in the seat, or from negligence on the part of the pupil. A seat that is too broad-naturally results in posterior curvature, for the reason that no support can be obtained from the back of the seat, unless the pupil leans back so far as to make his position absolutely insupportable without relaxation of the muscles. Too high a seat drags the lungs downward, and produces a similar effect. A low desk encourages a stooped position in sitting.

If the student has a habit of sitting too far forward upon his seat in a relaxed position, posterior curvature of the spine naturally follows. Students not infrequently acquire a slack habit of sitting in a relaxed position, with the trunk bent backward at the middle, even when the seat and desk are properly constructed, both in relation to each other and to the pupil. Correct sitting is a forcible position; not a strained position, but one in which the muscles of the trunk are active.

To remedy this evil, which I have sketched too briefly to give any adequate idea of its importance, requires:

1. Constant corrections by the teacher, of the improper attitudes assumed by the students, and the employment of suitable corrective exercises for two or three minutes at every change in the day's programme.

2. A regular systematic course of scientific physical training as an essential part of the daily work of every pupil in every school in all grades.

The conditions which surround the child during its school life are a mold into which it grows, and whereby the whole after life of the man or woman is favorably or unfavorably influenced.

Later revelations in medical science have established beyond doubt

the fact that a large share of chronic and disabling ailments from which men and women suffer have their foundation in the erroneous habits and vicious conditions of life during childhood and youth.

When the writer was a pupil of Professor Hartelius, the director of the Royal College of Gymnastics, at Stockholm, Sweden, some thirteen years ago, he was told by that eminent and experienced teacher of gymnastics that he had never encountered curvature of the spine in a single case in which the individual had had the advantages of gymnastic training during his school-going period. At that time gymnastics had long held a prominent position in Sweden, being by law obligatory in every school. The result is to be seen in the erect and well-developed physique which is the prevalent type in Sweden. One may see, on the streets of Stockholm, a larger proportion of men and women with fine figure, and graceful carriage than in any other city in the world.

The benefits of exercise in connection with the school work are not confined to its influence upon bodily shape. The growing period is the only time in life at which any marked change can be effected in the physique. This is the time for enlargement of the lungs, development of the chest, and the correction of any errors, weaknesses, and morbid tendencies. Systematic daily exercise, carefully adapted to the age and strength of children, produces, even within a comparatively short time, marvelous results; *e. g.*, an eminent French physiologist found the volume of respiration during sleep to have doubled in the students of a boarding-school as the result of six months' systematic exercise.

During the twelve or fifteen years spent in school, the sedentary habit often becomes firmly established, so that in after life exercise is avoided as much as possible, through a natural aversion to it; whereas the physiological necessity for exercise increases with advancing age; so that a cultivation of the habit of exercise, and the appetite for it, may be properly regarded as one of the important objects to be attained during the school-going period.

A thoroughly enlightened community will provide, in connection with its public schools, gymnasia and laboratories; and when we become sufficiently civilized to value health as highly as does the savage, we may expect that our municipalities will take such steps as will save a sufficient amount of money, now wasted in attempting to repair the ravages of alcoholic drunkenness and other forms of vice, to provide for every city a suitable number of public gymnasia and swimming-baths, and that it will be considered at least as important that a child should have a large pair of lungs and a vigorous chest, as that he should understand Greek and Latin or natural philosophy, and

more important that a man or woman should be able to swim than to calculate an eclipse of the moon. Our schools, seminaries, and colleges are every year turning out a lot of young men and women who might properly be termed "school cripples," who are maimed in body by the neglect and the harmful environment to which they have been subjected, and damaged intellectually by the one-sided and artificial methods under which they have been trained.

A volume might easily be written—indeed, volumes have been written—upon the evils arising from deficient ventilation, bad lighting, dust, the vicious habit of spitting, and other means of transmitting disease, and the danger of moral contamination, and the contraction of sexual vices from the evil associations to which children are more or less exposed in our schools. The limit of this paper has already been reached, however, and I will conclude by urging upon every teacher in our public schools the importance of making a careful study of all that pertains to the physical welfare of the pupils while under the teacher's care, and I would further add the suggestion that immense advantages might be gained by the holding of parents' meetings at regular intervals, for the purpose of discussing the needs and interests of the child in both the home and the school, and securing the co-operation of parents in establishing for the child in the home such conditions as will second the efforts of the teacher in the school-room in the development of a well-rounded character, and the attainment of the highest possible educational ideal, that recognized by the ancient Greeks, who set us a noble example in so many matters pertaining to education, "A sound mind in a sound body."

PHYSICAL TRAINING AS A FACTOR IN CHARACTER BUILDING.

BY JAMES L. HUGHES, PUBLIC SCHOOL INSPECTOR, TORONTO.

Unity is the fundamental ideal of all true education. In the development of human power, the physical, the intellectual, and the spiritual should not be cultivated separately. They are so definitely interrelated that they should be developed as a unity. Each department of human power requires special culture, but no department should be developed for itself alone. The worst failures of educators have resulted from the attempts to train only one department of power, to the neglect of the other elements in complete character.

Character building is the highest educational ideal. Unfortunately the acceptance of this ideal has led many into the error of

believing that formal instruction in morals and religion is the surest means—if not the only means—of defining and developing character. This error has led to the many unreasonable positions in regard to religious training in the schools. The concentration of all educational agencies on the training of any one department of power is sure to produce an abnormal being; a physical, an intellectual, or a religious crank. The religious crank is the poorest result that a system of education can produce.

A complete character must have physical elements, as well as intellectual and religious elements. The character of an individual can be complete only when each of its elements has been made as perfect as possible. The omission of any element, or its reduction below its possible standard of power, essentially weakens character. The duty of the character builder is to make each part of the structure as strong as its natural condition warrants. In doing this care—great care—must be taken to avoid developing one element at the expense of another, especially at the expense of the physical, when it is naturally weak. Paul Dombey was murdered by his father and Dr. Blimber. His aunt, Mrs. Chick, told his father that "Our darling is not altogether so strong as we could wish. The fact is, his mind is too much for him. His soul is a great deal too large for his frame." Notwithstanding these facts Mr. Dombey took Paul to Dr. Blimber's school, and gave instructions that he was to learn "everything." Dr. Blimber accepted the commission, ordered Miss Cornelia to "bring Dombey on," and his "mind" and "spirit," already too strong for his weak body, were strained to their utmost limit. His feeble, overtaxed body soon yielded to the strain, and his premature death resulted from the ambition of his father and the ignorance of his highly learned teacher. Learned he was in the "deceased languages," but completely ignorant of the most important of all educational principles—that the human being is an organic unity of interdependent elements. Paul's mind and spirit were relatively too active for his body, yet no attempt was made to develop his body. The departments of power already too active were wrought at high pressure; the weakest department was utterly neglected, and robbed of its share of nutrition by keeping the brain in an abnormally active condition, while the body had no opportunity for the increasingly energetic exercise so essential to its proper development. The law to determine the amount of special culture for the individual elements of power in human character should be: "Give most careful culture to the weakest element." Paul's weakest element was the physical element, and it was entirely neglected till at length it succumbed, and the doctor had to be called in to make a vain attempt to stir to life the fee-

ble body which had been thoroughly sapped of its vitality. Dickens taught the world a needed lesson by his story of Paul Dombey.

Physical culture is an important factor in character building because it has a beneficent influence on the elements from which character is constructed. The central element in a well developed character is a strong, active, well poised mind. The mind, however, requires a good body in order that the brain may be fully nourished, and that its decisions may be definitely executed. A strong character is one with sufficient executive power to have its decisions carried out. The power to decide correctly is essential, but executive energy is necessary to transform wise decisions into moral forces. The two basal elements in character are an active, well-balanced mind, and a strong, well-nourished, responsive body. Physical training helps to secure both. Wise physical culture aims to strengthen all the vital organs of the body and to increase their functional power. Millions of people would be improved in character-quality and in character-force if they could exchange their stomachs, lungs, livers, and hearts for new and perfect organs. They cannot be exchanged, but they may be improved in strength and functional power. The brain receives the advantages of better digestion, fuller breathing, and the more energetic circulation of pure, rich blood more quickly and more fully than any other part of the human organism. Physical training, therefore, while improving the bodily functions and defining the bodily powers, at the same time invigorates the brain and provides for its better nutrition. Montaigne, long ago, saw the relation between physical and intellectual culture, and he tersely expressed it in the aphorism, "To brace the mind we must strengthen the muscles."

Physical training has a direct influence in the development of the brain itself. It cannot increase the number of cells in the brain, but it does develop dormant cells and increase the size and energetic action of those already partially developed. It gives a new dignity to physical training to realize that bodily action has a direct influence in brain development, and that the failure to develop the smallest muscle in the body to its best limit of strength, activity, and grace, leaves some portion of the brain in a dormant or only partially developed condition. Whether the muscles are controlled by voluntary action of the will, or act without the conscious direction of the mind, the increase of muscular energy calls for a fuller development of the department of the brain which supplies the energy. The physical training that improves the functional power and strengthens the muscular force of the heart, or lungs, or stomach, or the abdominal viscera, induces a development of the brain in the corresponding departments, as certainly as the training and strengthening of the mus-

cles of the arm or the leg secures the development of the portions of the brain that control them. The essential thing to be remembered is that if even the little finger is not trained so that its activity in all directions becomes as energetic, as varied, as definite, and as graceful as it should have been, there is a corresponding lack of development in the brain. This greatly increases the importance of physical training, for notwithstanding the fact that the brain has more extraordinary power to remedy defective development than any other part of the body, it is very clear that if any portion of the brain is undeveloped, the whole organ must be to that extent imperfect, and the imperfection must impair its efficiency by weakening its action, or its power to resist fatigue, either of which results reduces man's moral and intellectual force.

But physical training does more than develop the cells of the brain. It aids in the extension and co-ordination of the entire neurological system. The thorough organization of the brain and nervous system is of more importance than mere increase in size and weight. Size and weight of brain proceed to a considerable extent in the case of idiots. Perfect and complete organization of the neurological system depends on the development of cell outgrowths, the neurons and the dendrons, on the establishment of definite pathways for the transmission of the afferent and efferent impulses, on the perfect interrelation of nerves and nerve-centers, and on the perfect distribution of blood to the nerve-centers, as well as on the enlargement and correlation of the sensory centers and the motor areas. Physical training aids in the anatomical development of the entire system, and in securing the necessary functional reactions.

The most important of the effects of physical training on the brain and nervous system is its influence on the motor area of the brain and the efferent nerve fibres. This department of the controlling power of humanity needs special culture because it has been most neglected by educators. For generations the sensory system has received special attention in the schools. This has destroyed the balance between the receptive, the reflective, and the executive powers, and has increased instead of lessening the most universal weakness in human character—the failure to execute our decisions, to do as well as we know, to attain our highest ideals. The receptive, the reflective, and the executive powers should act in harmony. The development of the receptive and reflective powers without giving corresponding training to the executive powers, destroys the natural unity of the three great elements of mental and moral force, and inevitably weakens human character in its most vital department. The development and training of the sensor and motor departments of the neurological

system should be adjusted equitably. Neither should increase in power at the expense of the other. It is especially true that the motor areas and the tendency to motor activity should be increased. To give greater power to receive impressions and form conclusions, without increasing the tendency and the ability to transform these impressions and conclusions into accomplished purposes, produces a negative and usually a selfish character. Unless the executive side of character is developed, the receptive and reflective powers have no means of aiding the upward progress of the race. The motor system having been neglected so long in the schools, should for a time receive special attention in order to give the race a more definitely executive character, and make it positive instead of negative. Physical training is one of the most available school agencies for the attainment of this very desirable end, as it not only develops the motor neurological system, but aids in the establishment of habitual stimulative reaction between the sensor and motor systems. In physical training the signal or command of the leader or instructor immediately becomes a controlling impulse that leads to definite action. This greatly aids in the co-ordination of the sensor and motor systems, and of the receptive, reflective and executive powers.

Physical culture influences character by making the body more erect and well poised, and by making its action more definite, more forceful, more graceful and more free. The improved attitude of the body reacts on the character in two ways. The functions of the vital organs are more fully performed, because they are more free, and the character therefore gains in force; and the consciousness of erectness and poise brings with it an added consciousness of self-faith, dignity and integrity. The body becomes in time an external manifestation of the character. The motions of the arms, the step, the habitual attitude, the poise of the head, even the way the fingers and thumbs are used or held, reveals to the experienced observer the character behind them. To a certain extent it is equally true that the body by its attitudes and its modes of action influences the mind. Body and mind are so intimately interrelated that the one necessarily reacts on the other. Make the sweep of the arms more free and you widen the conception of freedom, and register the new conception on the brain and nerve centers by effecting changes in their development, their structure or their paths of action to correspond with the new movements they have been required to direct. Change that boy's step from that shuffling gait, and make a definite, free step habitual, and you have helped to change his character. That poor boy whose knees bend weakly as he stands, lacks moral fibre as well as physical definiteness. Straighten his knees and you have done a good deal to straight-

en and define his character. Watch yon boy with the jerky, angular action. Study him carefully and you will learn that his temper and character have conditions corresponding to every jerk and angle.

Transform his jerky, angular action by proper physical training into graceful, rhythmic activity—and his character will gradually tend to conform to the altered conditions. Courtesy and calmness will take the place of uncontrolled irritation. His action gains in force what it loses in spasmodic energy. He can do much more work for the world because he wastes less power. He will probably live longer, even though he may work harder, because you have substituted calmness for petulance, and rhythm for spasmodic effort, and have thereby helped to prevent his becoming a nervous wreck. Leave that listless boy in his present condition, and he will do little to stir the world around him; but by the persistent use of wise physical culture give him more power, and make energetic motor activity automatic in his life, and he will make his mark not on the sands of time only, but on the everlasting rocks of eternity. In all these cases the transformation in bodily attitude or activity is accompanied by a gradual change in moral quality or moral force, which is based upon an improved mental quality or mental force, which is recorded in the brain and other parts of the neurological system. Thus the body not only reveals the character but helps to form it. It is true that the spiritual nature controls the physical; but the physical nature influences the spiritual. It is easier for evil influences to corrupt and destroy the character of young men with weak, untrained, inactive, imperfect bodies, than it would be if the young men had vigorous, well-developed, well-trained bodies. Paradoxical as it may seem there is much force and truth in Rousseau's epigrammatic statement that, "The weaker the body the more it commands; the stronger it is the more it obeys." There is a direct relationship between moral and physical health. The spiritual, the intellectual and the physical form a closely interrelated unity, each element of which affects and is affected by the others.

Physical training has a good moral influence by helping to prevent the "breaking out" of young men into periodical attacks of lawlessness to work off superfluous energy. Professor Donaldson says: "There is no doubt that during the growing period this surcharging, though not regular, is an event to be expected, and may take almost any form of expression." Professor Richards pointed out that disgraceful college disturbances became fewer and less violent as the athletic spirit increased. Wise teachers know that timely practice of physical exercises is the surest and the quickest way to secure order, system, and co-operation in a disorderly, irregular, and indifferent class.

But the highest moral culture resulting from physical training is derived through playing. Informal physical exercise in connection with out-door sports and games is the highest form of physical culture, because it results from and develops self-activity. In every department of human development formal culture is necessary to improve the elements of power to be applied; but in every department self-expression is the supreme ideal. Physical training is no exception to the general rule. The elements of physical power should be cultivated by formal physical exercises, and applied through self-activity in games.

In the games there is a better moral influence because the child enjoys the effort he puts forth for the accomplishment of a definite purpose. The element of joy is most important because every good feature of character grows more rapidly in joyous conditions. Joy is the sunshine that gives vitality to good principles.

Games afford admirable opportunities for developing the virtues of self-control and self-direction. Each boy must decide for himself when and how to act in the ever-varying exigencies of the game. He must not only decide, he must execute his decision promptly and energetically. No other school work defines energy of character more than this. Man should be a self-directing agent. Play is the best school agency for developing propulsive power.

By playing boys and girls learn to bear defeat bravely, and to work harder for victory tomorrow because it has not been won today. Final triumph won by persistent practice and patient effort for success fills the young character with the faith and hope that are so essential to success in the life struggle of later years.

The playground is the best place for developing the consciousness of individual power and responsibility, and forming apperceptive centers in the minds of children around which may be gathered ideas of the highest social ideal—co-operation or the organic unity of the race. The boy who is a member of a cricket, lacrosse, football or baseball team learns in the most definite way that the more completely he develops his powers and the more perfectly he can perform his part the more certain his team is to win. He learns, too, that one weak player weakens the whole team. Each member thus learns more surely than he could in any other way the lesson of individual responsibility and the value of individual power and individual effort. He learns too, the higher lesson of unity, or co-operation as the basis of complete success. Victory results from the combined efforts of thoroughly trained individuals who are working heartily for the accomplishment of a common purpose. Playing games governed by well-defined rules trains character by developing a spirit of hearty submission

to law. This was recognized even in Plato's time. That great educational philosopher wrote: "If children are trained to submit to laws in their plays, the love for law enters their souls with the music accompanying the games, never leaves them, and helps them in their development."

Froebel, with his wondrous power of insight saw that: "Child's play strengthens the powers both of the soul and the body, provided we know how to make the first self-occupation of a child freely active, that is, creative or productive."

DISCUSSION.

BUEL T. DAVIS, Superintendent of Public Schools, Winona, Minn.—Not having seen until this morning the most excellent paper presented by Inspector Hughes, I think I may be pardoned for entering upon its discussion with some feeling of temerity.

I think the paper sets forth in a most delightful and comprehensive manner the great work and responsibility of the teacher—"character building"—and points out clearly and correctly the necessary and important relation sustained by "physical training" to that work.

There is no principle set forth in this paper with which I am not in hearty accord, and it seems needless that I should enlarge upon any of the topics treated. I may, perhaps, venture to restate a few inferences which I have been able to draw from my necessarily hasty view of the paper, and, in connection, add briefly a suggestion or two upon my own account.

The idea of unity set forth in the paper, cannot be too strongly emphasized, provided it be a unity which is as broad as the child and which is sufficiently comprehensive to include the entire nature of the being to be educated.

Physical training means more than a manual of formal exercises selected from the Swedish, German, Delsarte, or other schools or systems. These all possess merit and may all truly and properly have a place in an ideal system of physical culture, but there is a side to physical training which has a more intimate relation to the child than any of these and it is this that I wish to emphasize here. I refer to those methods or means of physical training which appeal to the child less formally and which meet with a spontaneous vital reaction having a foundation in interest and the nature of the child.

This principle not only recognizes the important relation of play to physical training but points to the physical relations of all of the natural and incidental occupations and activities of the child. Drawing, handcraft, manual training, music, reading, etc., all may sustain important relations to physical training.

Viewed from this standpoint the work of the specialist in physical education is a broad and intricate one, and the relation of physical training to the whole unity to which it belongs necessarily renders it broad, intricate, and more incidental and related than formal and direct.

As suggested by the paper, Froebel was right when he taught that "Child's play strengthens the powers both of the soul and the body," etc. In other words the spirit of the kindergarten is right, and this same spirit growing with the

child applies to all grades of work, and, undoubtedly, suggests some form of manual and physical training for all grades and all classes of people from the cradle to the grave.

Just what this form should be, and what part remains to the public school teacher, the paper does not undertake to say nor is it my purpose to discuss at this time.

A very important part of human strength is developed by incidental, related and indirect means, and this is as true of physical training as of the training of any other parts of the being. The fact of the incidental relation of physical culture to the rest of the being often gives rise to the idea that physical culture needs no special attention, but that nature may safely be permitted to take its own course.

Why should this be any more true of physical training than of mental or spiritual culture? Not only should those who are to be physically educated be informed as to the laws of health and the care of the body, but the body should be trained and that training is best which is directed by the higher wisdom and the richest experience.

Physical training is therefore, not simply vitally related to the building of character, but the physical enters into and is a part of the character, and if the character is improved, the physical can in no sense be ignored, but must receive careful attention by those specially prepared and skilled in the work. I may add that every department teacher should be such a specialist.

It seems to me that Inspector Hughes has pointed out in a most admirable manner the trinity and yet, at the same time the interrelated unity of the whole being, and the educator who fails to fully comprehend and practically apply this truth is to that extent a failure in his calling. Any success attained without the comprehension of this principle must be accidental rather than intentional.

If we recognize the three-sided nature of man, and admit the importance of physical education, and the necessity for specialists in this department of education, as I think the most of us do, why should there not be two, and only two, other classes of specialists in teaching, viz., those devoted to mental training, and those devoted to spiritual or moral training.

Should these three classes of specialists in education be recognized, it is evident that the idea of unity would demand that their work should be intimately interrelated, or, perhaps I had better say correlated and concentrated.

The leading conclusions that I would have you draw from this discussion is (1) that physical training is necessary to the building of character; (2) that physical training covers a broad field, as broad as the nature and character of the being, and, (3) that specialization, while desirable, should never have a tendency to narrow the work, but should broaden rather than limit the natural tendencies of both pupils and teachers, and no influence should ever attempt to relieve either pupils or regular department teachers from their responsibility in the matter of correct physical training.

SHOULD WE HAVE MILITARY TRAINING IN THE SCHOOLS.

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Every ten or twelve years the question of military drill in our public schools is brought prominently before the community. Undoubtedly the wave of patriotism that periodically sweeps over the country is partially responsible for the revival of this militant spirit.

As parents, however, do not take kindly to warlike preparations, especially if they presage the sacrifice of their own children, the argument most generally advanced in favor of the introduction of military drill into our public school system is that it furnishes an admirable means of physical training. To a brief consideration of this phase of the subject I respectfully invite your attention.

Those of us who aspire to be teachers of physical training consider it our duty not only to study the structure and functions of the body, but also to acquaint ourselves with the various means and methods of improving it. With this end in view a careful analysis is made of different movements and exercises, and their effects upon the physique are duly observed and recorded. In this respect the physical instructor is not unlike the physician who studies the nature and effect of different drugs and medicines before prescribing them for his patients.

In course of the physical examinations made at Harvard University some ten years ago my attention was called to the physical peculiarities, deficiencies, and deformities which existed in a large number of boys coming to Cambridge from the public schools of Boston. I looked into the early history and training of these boys and found that military drill had been their regular exercise from the time they were nine or ten years of age.

I made a study of the effects and deficiencies of military drill as a physical exercise, and in a paper read before the Massachusetts Medical Society in 1886 I called the attention of the medical profession to my observations on these school boys and suggested other forms of exercise for development and remedial purposes. The discussion which followed the reading of this paper and the interest it aroused in the general subject led to a modification of the military drill as taught in the Boston public schools. These modifications consisted in a reduction of the weight of the gun, the increased use of the left arm and side, and a more general practice of elementary gymnastics.

It would seem that a few concrete cases like the ones described were all that were necessary to convince unprejudiced observers that military drill alone does not meet the demands for physical training in the public schools.

My principal objection to military drill as a means of physical training was then, and is now, that it does not in itself, even under the most favorable circumstances, meet the physiological requirements of a perfect physical exercise. An exercise in order to furnish good physical training must be interesting in itself to engage one's attention.

It must furnish a weight or resistance to be overcome. It must be performed with sufficient vigor and rapidity to engage the energetic contraction of the muscles employed. It must bring into action as many muscles as possible. It must insure increased activity of the heart and lungs in order to improve the circulation and respiration.

There must be no tetanized movements but alternation in the exercises in order to improve the nutrition of both muscles and nerves. There must be co-operation and co-ordination of the muscles, which involves the training of the central nervous system.

Military drill as taught in the schools is not of sufficient interest as a means of physical development to arouse any moral earnestness and enthusiasm on the part of the boys. Take away the uniforms, prize drills, public parades, brass bands and flowers, and the exercises would be considered tedious in the extreme.

The exercise of the manual is not performed with sufficient force and rapidity to engage the energetic contraction of the muscles employed. It is essentially a one-sided exercise, bringing into excessive action the elevators of the right scapula, the deltoid, biceps, flexors of the forearm, wrist and fingers of the right side, while the other muscles excepting the legs on parade days, do not get sufficient employment to keep them in good condition. It does not increase the respiration and quicken the circulation to a sufficient extent to secure the constitutional benefits that should accrue from exercise. During the drill the clothing is buttoned close around the chest and natural respiration is hindered. The muscles are not alternately contracted and relaxed, but are tetanized or kept in a state of prolonged contraction. This, as we all know, not only impairs the tone of the muscles used, but it also puts an additional strain upon the brain and nervous system at a time when both should be relieved as much as possible. Finally, the mere exercise of the manual of arms does not give sufficient breadth and scope of movement to secure the co-operation of the muscles, and as a training for the central nervous system it has little or no value.

Coolness, courage, presence of mind, and that rapid and responsible

exercise of judgment in emergencies which are brought out so admirably in the practice of athletics and certain forms of gymnastics, and which are so valuable to the man of business as well as to the soldier, are not developed by the drill itself, though I will admit that other moral attributes, such as obedience, patience, fortitude and forbearance, may be brought to a very high degree of perfection. As a matter of fact, nearly all of the normal schools of gymnastics teach the facings and marching evolutions of military tactics.

At my Normal School for the Physical Training of Women at Cambridge and at the Harvard University Summer School of Physical Training for both sexes, that part of the infantry drill regulation referring to the school of the soldier and the school of the company, excepting the manual of arms, is very thoroughly taught. In fact I believe that the facings and marchings should be taught in every school in the country. And in order that this kind of instruction might be uniform I should strongly advocate the adoption of the regular army tactics.

But the primary object of the facing and marching as taught in our normal schools is not so much as a means of physical exercise (although it may be a good form of walking) as it is to enable the instructor to manage large classes, keep them under good discipline, and try and improve their time reactions by making them respond to rapid commands. In the minds of most persons military drill consists in handling a musket after the prescribed regulations as set forth in the infantry drill regulations, and there are persons who argue that this method of handling a gun is the best form of exercise.

The community at large have long entertained the idea that there was something about this kind of military drill that made young men erect, or as some have been pleased to term it, gave them a graceful and manly bearing.

Unless I have been misled in my observations, there is nothing in the drill itself that tends to make one erect or graceful. On the other hand, I am prepared to maintain that it tends to make one stiff and angular in one's movements as well as to droop and round the shoulders. That military drill might be so conducted as to bring about all these desirable physical results I am free to confess—but then it would cease to be a military drill. Young men could be taught to balance fours, waltz to the right, glide to the left, or dance to the front in view of conquering the enemy and making themselves graceful and well-poised at the same time.

This would hardly be the most direct way of accomplishing the grand object of the soldier's mission. Unless all had taken dancing lessons of the same dancing master the difference in step and style

of movement might lead to some embarrassment on the field of battle. We must constantly bear in mind that military drill is the technical art of teaching one body of men to wound and kill as many as possible of another body of men without being wounded or killed themselves. To accomplish this object and to handle large bodies of men, the working unit is four men instead of one.

All of the soldier's individual movements are prescribed with this idea in view, and whatever he does is done with some regard to the other three men with whom he is so intimately associated.

When a soldier is ordered to bring his gun to "carry" or to "right shoulder," or to "support," or to "charge bayonets," the command is not given in view of the effect these exercises are to have upon the actions of particular groups of muscles engaged, but for the purpose of handling the musket as an offensive or defensive weapon and to rest the muscles employed by change in position.

Now that the fire arms are being so rapidly improved, and the open formation is becoming more and more necessary, the exercises of the manual and the use of the bayonet are in the opinion of high military authorities of less and less importance. The sole use of the gun is to shoot, and the tendency of all military instruction at the present day is to make the soldiers experts in this death-dealing function.

In the work of the soldier, as in every other trade or industry, the man is expected to subordinate himself to the art; that is to sacrifice health, symmetry and individual cultivation and development to the immediate demands of military service.

Under such a regime it is not surprising that the man, to say nothing of the plastic and growing boy, should soon take on the stamp of his trade, just as he would had he devoted an equal time to the service of a carpenter, jeweler, tailor or sailmaker. In each vocation one must judge of the effect upon the body by the nature of the work done and the parts of the body brought into play.

To show you how absurd the claims of military drill are as a means of physical development, assume for a moment that a teacher of physical exercises should substitute the musket for a wooden or iron wand, and confine the movements to those that are prescribed in the manual of arms. Would any one having any knowledge of anatomy and physiology presume to call such a drill a perfect exercise. The closely constricted movements, the proximity of the hands to each other, and the distance of the piece in front of the body—all tend to cramp the chest, droop the head, and round the shoulders and curve the spine. Moreover these facts were long since brought to the attention of the military authorities and a set of calisthenic exercises or free gymnastics have been incorporated into all of the treatises on

military tactics, to correct this tendency—I refer to what is familiarly known as the “setting up” drill.

Upton says in his manual of United States Army Infantry Tactics, “As the importance of setting up cannot be overestimated the exercises must often be resorted to, and all soldiers will be frequently practiced therein.”

In this connection it may be interesting to note that the new tactics, although allowing ever so much more freedom of action on the part of the individual soldier, has three times the amount of free gymnastics prescribed as are contained in the old tactics.

Mr. Herman Koeler, master of the sword and instructor in gymnastics at West Point, has by the authority of the Secretary of War, issued an extensive manual of Free Gymnastics which has been adopted by the United States Army. In a letter to Col. Thomas F. Edmunds, of Boston, chairman of the committee appointed by the Boston Physical Culture Society to investigate the use of the musket in the public schools, Mr. Koeler writes:

“The use of the musket as a means of physical development of any one, be he man or boy, is worse than worthless; it is in my opinion positively injurious. Here at the Academy the bad effects are not so apparent for the simple reason that the rifle is in the hands of the cadets only at certain periods of the year, and then only for a short space of time each day.

“Then, again, the cadets have such various drills beside the regular gymnastic work that, even if there should be a tendency to become ‘lop-sided’ this tendency is counteracted by other work. But it is not so with soldiers who, being older, are supposedly less liable to suffer from this; even on these, however, it has its effects.

“Since the present system of physical training has been added to the curriculum of this institution, the eyes of even those officers of the army who have ever maintained that the manual of arms, setting up exercises, and tactics were more than enough to develop the soldierly qualities of any man, have been gradually opened. These same men, when the question of physical training by any other means was mooted, would have none of it. To them this was an innovation not consistent with military usage, at least not in our country; the drill regulations did not prescribe it; they did not want athletes but soldiers, etc. However, a change has been wrought, as I said before, and the great truth has at last dawned upon them that athletes make the most superior soldiers, and that even those who are not athletes, but have enjoyed the benefits accruing from a good physical education, are really molded into better soldiers than those who were educated under the old rules and methods. In consequence of this you find to-

day that almost every post in the army has an officer detailed, whose duty it is to give the men as much gymnastic and athletic training as time and facilities will admit."

Col. G. M. Fox, of England, has prepared a similar manual, entitled "Physical Drill With and Without Arms," for the use of the British army. In this case the musket is used as a wand and all of the exercises prescribed are in view of developing certain groups of muscles. These exercises have no possible connection with the use of the gun as an offensive or defensive weapon.

Several years ago, Dr. C. R. Greenleaf, at that time Assistant Surgeon of the United States Army, read a paper before the American Association for the Advancement of Physical Education at Boston, in which he laid great stress upon the poor physical condition of the army and showed how sadly they were in need of gymnastics and systematic physical training at the military posts and recruiting depots, in order to keep the soldiers in condition for service.

Since then the government has built and equipped a large gymnasium at West Point where every branch of military service is taught, and small gymnasiums are established at many of the military posts. If then the leading military school of the country, and the army officers at their respective stations in this country and in Europe, find it difficult to develop soldiers out of citizens by relying upon military drill alone, is it not strange and unnatural that we should resort to military exercises as a means of developing citizens out of school boys.

During the late war one of the most surprising facts that was brought to light by the surgeon general of the army was the number of men that were rejected from the service on account of physical disability.

The ratio of men that were refused admission to the army from the professional, skilled, and mercantile classes on account of disease in general was in round numbers 367 per thousand from all occupations, 520 per thousand from the professional class, 479 from the mercantile class, 434 from the skilled, and 348 from the unskilled laborers.

From the professional class the largest ratio of rejections was among the editors, being 739.7 per thousand; then followed the teachers with 739.5 per thousand; physicians 670; clergymen 664; public officers 627; dentists 548; lawyers 543; architects 533, and finally students at the rate of 328 per thousand. That over one-half of all the persons drafted during the Civil War from the professional classes and over 46 per cent. from the mercantile class, and 43 per cent. from the skilled laborers should be rejected on account of physical

disability and disease are sad commentaries upon our habits and conditions of working and living.

Today the future artisans, mercantile and professional men of the country are largely in our public schools.

If the presumable object of introducing military drill into these institutions is to prepare our boys to be possible soldiers in time of war, would it not be a much more rational procedure in view of the facts just quoted to train them to vigorous health, and to spend our energies in building them up and broadening them out into the highest types of physical manhood before cramping them or stamping them with the badge of any trade or profession.

If, after the broad physical foundation is laid by the practice of a wide range of gymnastics and athletics, our colleges, professional schools, or military organizations are willing to teach and to train them to perform the duties of the soldier, it is eminently right and proper. If the national government and the several states are really desirous of cultivating a military spirit in our American youth with the physical ability to back it, I have another suggestion to offer.

In many of our large cities there are regimental armories, built at the expense of the public and left unoccupied most of the day. Let these armories be turned over to our public schools for certain hours, to be used as public gymnasiums. Let the school boys be marched to these buildings, if necessary under the semblance of military discipline, or let them assemble voluntarily and then be led through a series of gymnastic developing exercises, and recreative sports and games—which long experience has proven to be the best calculated to strengthen character and built up the physique.

Then we should not have 50 per cent. of our young men exempt from service in time of war on account of physical disability, or an army of boy soldiers made vain, conceited, and blazé because their limited school drilling has made them think their military education complete.

DISCUSSION.

MRS. FRANCES W. LEITER, Mansfield, Ohio.—There is growing conviction that American children should have healthier, better disciplined bodies, which, in these days of intense civilization, must be secured through systematic physical education. Under cover of this, military drill is brought to the front as a training which meets a great need.

One of two positions must justify making military drill a factor in public school discipline. Either we must educate for war, or military training fills important physical demands of our developing school boys, few of whom are out of their "teens."

There was a time in the experience of this country when to be an American citizen meant being a soldier, involving the possible sacrifice of home, kindred and life. This was the result of circumstances and conditions that do not exist today. The trend of higher civilization is in the direction of humanitarian means for settling differences between nations. The heterogeneous character of this people, with conflicting ideas and varying customs, as well as the possible chance of difficulties with foreign powers, will doubtless make a limited trained military force always advisable, to be utilized in emergencies and as a last resort. This can be amply provided for through the medium of national and state military academies and organizations. Our public schools should constitute the nursery of citizenship. Instead of drilling these oncoming citizens in the art of warfare, we should, in these enlightened days, teach them the doctrine of arbitration.

The belief in military training as an educational measure grows out of a fallacy. The boy studies the pages of American history and imbibes the idea that, somehow, war and patriotism bear synonymous relation. Because of this any effort to oppose such legislation as was pending in Congress during the past winter is regarded by some as unpatriotic.

The question naturally arises: What is claimed for military drill in the line of physical betterment. Prevailing sentiment responds: Fine physique, military bearing, obedience to command, etc. Here again is concealed a fallacy which blinds the eyes and dulls the sense of those who look upon military parade as the great flower show of national dignity. If these conditions could only be secured through the development of the soldier, the great value of military tactics, even in lower school grades, would be apparent. Outside of war significance, all the benefits claimed from militarism in our schools can be even more successfully secured through the medium of systematic physical education in the various grades and the facilities of a fully equipped gymnasium for advanced pupils, including girls as well as boys.

Advocates assure us that the drill need not involve war purposes, and that the "paraphernalia helps hold and interest the boys."

The testimony of the Secretary of War, in his last annual report, and the report of the House Committee recommending the passage of one of the bills in Congress providing this drill in the schools, prove that it does involve war purposes.

In the most susceptible years of their lives, so far as such influences are concerned, why not turn these "notes of promise" loose upon buckskin, feathers and paint, with ample supply of tomahawks and arrows and periodic exercise in the war whoop? Why not practice "make-believe" surprises and laying in treacherous ambush as innocent amusement? This would be diversion having some claim as physical exercise. The serious influence of such would not be questioned by any thoughtful individual. Civilized (?) warfare is removed a few degrees from savagery. It is organized; it utilizes weapons that outgeneral it in merciless, wholesale slaughter, as the mighty engine outranks the child's toy. However unquestioned may be the possible contingencies of any nation necessitating bloodshed, we strike at the very heart of peace when we usurp the true object of the public schools by introducing such agencies. To uniform our school boys by law and place in their hands the implements of war (no boy will remain satisfied with a wooden gun) may, in these days of long neglected physical development, mean soldierly bearing and the correct handling of arms, but it cannot fail to lead the imagination and desire toward bloody combat.

Our early ancestors understood the necessity for war as the door to liberty.

They afterward realized the importance of a ready military force; yet, when the public school system was established, this feature of discipline found no place.

In a speech advocating military training in the schools, ex-President Harrison is quoted as saying: "If from 1830, all the boys had been instructed in the school of the soldier, the company and the manual of arms, much time would have been spared in organizing an army in 1861." A more significant truth would have been uttered, had he said: "If the youth had previously received a well-grounded physical basis through education, little time would have been required to bring recruits up to the demands of campaign life."

To root out this popular fallacy—that self-immolation at the cannon's mouth and the point of the bayonet is the most sublime loyalty which a man can express to his country—rising generations must be taught that the type of patriotism which heaven records is the citizenship which seeks the greatest good of the nation in time of peace. This is citizenship and patriotism which will never flinch in the direst extremity of duty.

Physical education established in our schools will help build for all contingencies requiring brain and brawn, heart and soul, without which true patriotism cannot exist. Let us educate for peace, not for war; for citizenship, not for soldiery.

PROFESSOR J. N. WILKINSON, State Normal School, Emporia, Kan.—The answer to this question depends somewhat on how much military training and what school. The marching movements of the kindergarten and the procession at the college commencement and continuous drills between these extremes are military in their nature but hardly objectionable on that account. The full training of the West Point military academy will not be proposed for any other school in the land, nor will any considerable part of that training be put into schools of all grades, even by the most zealous advocates of military training for the schools.

That there may be some danger of producing physical deformity from the handling of heavy muskets by weak boys, and some tendency to the cultivation of a war spirit by the "pomp and circumstance" of parade may be conceded and yet sufficient reason found for introducing military drill while guarding, as far as possible, against these evils.

Genuine muskets and military uniforms for an organized battalion in a school system will not necessarily produce physical ruin nor destructive war. Most exercises given by military training in the schools are symmetrical. The training of the United States military academy itself is shaping to that purpose. The number of "setting-up" exercises has been increased and the development exercises of the gymnasium have become a recognized part of military training. For the sake of bilateral symmetry in the muscular effects produced by the manual of arms, a connected series of movements for the left side has been provided.

As to the desire for war, the commercial interests which find their only safety in peace will sufficiently curb any outbreak of the military spirit. Our readiness for fighting after the overthrow of the Rebellion did not drive us into any rash war about the Monroe Doctrine, though the French in Mexico were doing that doctrine the greatest possible violence.

Military drill produces many excellent results in the line of physical training. Open air occupation, erect carriage of body, better breathing and circulation and a greater power of endurance are secured. The training to attention, to the habit of prompt obedience and to the successful co-ordination of different movements of the body cannot be excelled by any other means. In the selection and promotion of officers, the spirit of order, of self-control, and of recognition

of superior merit finds great cultivation. The influence of a military organization in a system of schools gives a net result of very great value in interesting both sexes and all grades in the things that build up the youth of the country mentally, morally and physically.

A consideration of great importance in determining the attitude which should be taken by those who wish to promote physical training in the schools is found in the fact that no other form of muscular exercise is so universally popular as military drill. The "old soldier" element is ready to make a campaign in that cause. Those critics who insist that love of military forms and practices is characteristic of half-civilized people will concede that the pupils of our schools are in that culture period which finds food for its greatest interest in the warlike experiences of the youth of the race. The fondness for military display that is manifested by the numerous secret societies of today and the interest which most people take in their parades may be taken to indicate the enthusiasm which military drill will awaken in the schools. Even among the most devoted followers of the Prince of Peace, notwithstanding their anticipation of the millennium in which war shall be no more, there is, in at least the Salvation Army sections quite as much charm today in military phraseology as there was in St. Paul's use of figures of speech borrowed from war when he wrote the last chapter of his epistle to the Ephesians in the days of Rome's military greatness.

Discreet leaders in physical training will be able to secure for those under their charge much good from the military drill itself, and will find that the forms of military training constitute the easiest line of approach to a general physical training that is not commonly recognized as any part of military drill.

THE NERVOUS FORCE OF THE TEACHER.

BY MARA L. PRATT, M.D., DURANT GYMNASIUM, BOSTON, MASS.

There are certain occupations or trades in which the workmen receive wages most generous, as compared with their skill, for the simple reason that wrecking of health is inevitable; and that, too, in a very few years at least. One superintendent—from many years of observation—shows that among these deadly trades and occupations public school teaching should be ranked. He says: "I am satisfied that, under existing circumstances, no woman, no matter how healthy and young and strong she may be, can enter the schools in this city, do efficient and satisfactory work, and preserve her health and spirits for more than five years; and in many cases, the anxiety and nerve exhaustion are apparent in much less time." All great minds run in the same deep channels; and we find coöperating with this superintendent the two old friends, Carlyle and Emerson.

Emerson says: "Cobble shoes, maul rails, pick up stones, plough, make hempen ropes, hang yourself at the end of one of them, but don't teach school!" And Carlyle it was who said: "Whom the gods wish to make miserable, they first make school teachers of!"

And still, in spite of this noble triune authority, we shall, hosts of us, go on teaching school, though knowing the price we pay.

But they tell us, forewarned is forearmed. The workman among the chemicals, forewarned, forearms himself with the wet cotton sop through which he breathes, and in this way, and with this precaution, he protects himself and so insures for a longer time his health and life.

But in the teaching profession it is nerves we must preserve. It is nervous energy we must store up and guard with care. The sop of cotton will not serve us in this case; but we may be sure Nature never left the teacher the one totally helpless, hopeless workman in the universe.

To be sure it is not poisonous inhalations that the teacher must stand in dread of, but the wear and tear upon the nervous system. It is a wonderful, beautiful creation—this human nervous system of ours. It is God's crowning glory of creation and evolution. Till the nervous system evolved, God himself had no instrument through which he could speak unto man; and man had none through which he could catch a sense of the divine in himself and interpret it to high ends.

The delicacy of this nervous tissue is physiologically the true test of anyone's true fineness of soul capacity. No one but a sensitive, highly-organized nervous temperament has any right to teach. Only such a one is fit to handle human souls; only such a one is evolved to a grade capable of interpreting and judging and sympathizing with child nature. And yet it would seem that such a one must pay a price dear just in correspondence with her value when she enters the great machine-shop of public school teaching.

But what can she do?

Shall she turn away from the children, she who is so divinely fitted for the work, that she may save her health? Shall the children be left at the mercy of a grade of human beings who, like the inelegant tow-string, can stand the strain and not break? Or shall she offer up her health and her life on the altar of the child's best good, knowing that her sacrifice will be accepted and her downfall be complete in five short years?

There was a time when theology and sociology and the human heart demanded and morbidly enjoyed this manner of sacrifice; it was its own reward. But we today live in an age more practical, more wholesome and of more common sense. Old Jonathan Edward's answer to such cries from the human heart will not quiet the nineteenth century soul. To-day we doubt the justice of suffering always as the penalty for finer development. We are beginning to suspect that back of the suffering are broken laws—and that our penalty is the penalty of simple ignorance. With finer development comes naturally finer

susceptibility; but we need not fear. These conditions will adjust as simply as did the cruder conditions, if only we abide by the laws. But we must know the law and obey it; that is all.

It is beginning to be recognized in the medical profession itself that the great burden of disease upon the world today is of a neuros-thetic nature.

In old times people suffered from liver complaint, from jaundice, chronic bronchitis, etc. But today these terms are almost rare, and in their place are "nerve waste," "brain fag," "nervous prostration." These are the conditions of our day and generation, and even the most material-minded are coming to feel that the eighteenth century physiology and hygiene will not wholly protect the nineteenth century organism. The thud of the blacksmith's hammer will not bring tuneful vibration out of the delicate silver high-pitch strings of the sensitive violin.

The keynote of modern physiology is Mind; and no one more than the school teacher, living as she does in the nervous world wholly, needs to catch the significance of that keynote for her own protection.

Bone tissue is marvelous as seen under the microscope; muscular tissue strikes real awe into the human mind when one sees the wonderful adaptation of its structure to its use. But when one looks at the nerve tissue, so delicate, so transparent, so shining, fading away in its fibres into pure white light itself, how can one fail to see that this tissue of all other tissues must be the medium of expression for forces no less subtle than thought and emotion.

And this is true. Then it must follow, as the night the day, that whatever our thought nature is, like it must be the vibrations along these tiny silver threads.

Professor Gates, of the United States Commission of Biological Research, has proved most conclusively by chemical tests that all human tissues and fluids are affected by emotional conditions.

He has found that the blood of a large number of people after an attack of ill-temper responds uniformly to a certain chemical test; the blood of a large number after attacks of jealousy respond to another chemical test; of others, after grief to another; and so on through the line of emotional conditions. And never has it failed that the chemical generated by any malevolent, inharmonious mental condition is of an acid, acrid, poisonous nature.

What message, then, has such research for us as teachers? It is most plain. First, and above all, a teacher's mind must be at rest — not intellectually only — but emotionally. To fret and scold, to worry, to govern by will, to grow pessimistic, exacting and fault-finding, is to send down along these hypersensitive nerve-fibres of ours tidings,

not of great joy, but tidings that carry poison to the tissues, impoverish the blood and so, in time, destroy nutrition.

This is what "breaking down" means, and poisoned nerve-fluid will bring it about quicker and tenfold more effectively than "over-work" in any muscular or purely intellectual sense. Now, as the teacher goes on in her school life, what are her danger-signals? We know that the profession of law, long-continued, tends to destroy imagination; the profession of medicine to strengthen materiality; the profession of theology to destroy capacity for mental relaxation. The poet is certainly seldom a business man; the practical business man more seldom a poet.

And the teaching profession? Well, what? All day long, week in and week out, we stand in the mental attitude of a superior over an inferior, directing and governing, guiding and suppressing.

We are always on the watch—it is our business to be—but for what? Why, for faults and errors, to be sure. We become experts in detecting them. Indeed, it is in proportion as we become experts in capacity for criticism that we gain rank as teachers—strong or weak.

Now, the critical power is good in its right time and place and degree, we all admit. We begin by "watching out" for Johnny's faults—for his own good, to be sure. When he reads we watch for the word that may be wrong; when he gives us his spelling paper our trained eye catches instantly the wrong word half way down the page, and of his problems, it is the wrong answer that we seize upon and scratch with the big white chalk mark.

As Dr. Krohn says in one of his child-study lectures, "Oh, why don't you teachers put a smaller zero over the wrong answers? And when a little fellow gets a 100, why don't you mark that in big figures, so that all the school may see? It would be such a comfort in both cases!"

But to go back to the evolution of the "critical faculties." We criticise first for Johnny's good. But our mind acquires, meantime, the habit of flaw-hunting; by and by, true to habitual bent, and not discriminating between things in the schoolroom and things out, it begins to manifest its critical power on all the world. We find ourselves, or at least others find us, chronic fault-finders.

We look at a Corot, we read a book, we listen to Melba, and some way it is the minus qualities that rest in our minds. Our minds have got that bent. Looking always for the evils, we begin to see only the evils. The vision narrows. Our atmosphere becomes negative; we forget the good; we don't even see the good. Evil increases to our consciousness, and in due time we reflect and radiate that which we

are most awake to—the dark, the cheerless, the pessimistic. People and things are to us all wrong.

For it is a mental law that everything shall bear for each of us the aspect we give it. Love for love; antagonism for antagonism; pain for pain; and under this law we help to augment or decrease, even our health, for good or ill.

Then, there is that other bane of the teacher's life—discipline. It is the school director's first and most significant question, "Are you a good disciplinarian?" And we, knowing that if we are it may bring about an increase in our salaries of as much as \$25 or \$30, perhaps, strive to be good disciplinarians.

Now discipline, too, is all right and altogether necessary. But unless we watch ourselves and strive to counteract, there is a danger here as well. It is so easy, as the habit grooves deeper and deeper with constant practice, to mount from simple discipline to the dictatorial; and from the dictatorial it is not very far to intolerance; and again we tend toward the pessimistic, and so again toward conditions unhealthful as well as unhappy.

Did you ever enter your schoolroom on a Monday morning, teeth set, will fixed, and soul filled with a determination to straighten out certain things in that schoolroom or die in the attempt? There was John Callahan, who went just about as far last Friday afternoon as you propose to let him; and if you don't do another thing this week that boy is going to find out who rules.

And do you remember what a day you had of it? How the children did act; and, oh, how tired you were at night when you left the building! John was subdued most successfully, perhaps, but you were too exhausted even to enjoy your victory. Now why were you so tired that night after school? Because your nerves had been on tension all day? Yes, that was a part of the reason; but there was more in the process than that. Your blood-vessels had been so contracted all day, the heart-beat had been so labored, the respiration so hurried and superficial, that you were actually suffering from an extra poor condition of the blood at the close of the day. It was "too blue" that night—a condition not desirable in this free America, we are told.

Did it pay? Might you not have accomplished just as much had you carried to John and to the school great big, generous, expansive waves of thought? Such would have deepened the respiration, strengthened the circulation, quickened assimilation, increased nutrition, and so have stored up energy in the nerve-centers. For we may set it down as a fundamental law, that all self-willed pessimistic thoughts and emotions tense and contract all tissues of the body; they lower

vitality; they render respiration superficial and so, poisonous to the blood. The Delsarte philosophers try to show us this.

Contrariwise, all generous, beneficent, optimistic thoughts relax the tissues; they raise vitality, they deepen respiration, and so enrich the blood.

You may call it Mind Cure, or I may call it the legitimate action of the Sympathetic Nervous System. It doesn't matter particularly; the fact stands, that all pessimistic thought conditions injure us physically, because of their actual effect upon the blood as conveyed through the nervous tissue fibers.

The blood-vessels, wound round and round as they are with fibers from the great Sympathetic Nervous System, report the tense mental state. They become actually smaller in circumference as these fibers contract and tense around them. Because they are smaller, circulation is impeded; the heart becomes overtaxed; the respiration is lessened; the lungs lose capacity. And with respiration and circulation diminished no one need tell us that the oxygenizing process becomes imperfect, and so the general health must suffer.

There is certainly a physiologically divine abiding principle that has to do with the daily life of you and me and the children in our school-rooms. It is this: Harmony of mind helps to make better health. It is healthier as well as happier to be good and kind and optimistic. It is healthier as well as happier to lead and to be led than to drive and to be driven. Such is the wonderful law of reflex between mind and body.

Relaxation—mental and physical—should be the teacher's constant prayer. Openness to the influx of great big, generous, beneficent thoughts and feelings, and habitual turning away from the narrowing, critical, overbearing conditions that grow only too naturally out of the teaching profession.

Why can we not seize upon Johnny's rightly-spelled words—there will quite likely be fifteen out of the twenty—why ignore all these? Why not mark them with the big blue mark? Why not heed Dr. Krohn's plea and mark the perfect slate with a big roo?

Always say we, in the schoolroom, instead of you. Voice all the good things we see in the schoolroom among our pupils. We can train our minds to search for them as for pieces of gold. It would be well, according to the laws of physiological psychology, to say things are beautiful whether they are or not.

There is a psychological law underlying all assertion. Whatever we affirm over and over, even if mechanically at first, becomes, by and by, true to our sense? Then why not affirm the optimistic and altruistic? Every time a harmonious thing becomes true to our conscious-

ness—whether it is true or isn't true—it is a good thing for our nerves, and so, as we have seen, directly a good thing for our health.

And so, recognizing our professional tendency towards qualities not quite optimistic, and mental habits not quite lovable, can we not, as teachers, study to avoid the contractive, the negative and the pessimistic for our own health's sake; and, guided by the physiological law of habit-formation, with which, since Professor James has shown us, we are all familiar, train ourselves into the expansive, the positive and the optimistic?

It would be to us a conservator of nervous force equal with that of tonics or sedatives. We need good air; we need right food; we need systematic exercise; and when we are ill we must call upon medicine to aid nature to our recovery. But in and about all these, we cannot afford to ignore the needs and claims and laws that underlie the sympathetic nervous system, through which emotions report themselves, directly affecting our health for good or bad.

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Your President has asked me to say a word just here for the bicycle. In direct connection with this train of thought, it will not be inconsistent to speak of the ubiquitous wheel. I am rejoiced to see here at this Buffalo meeting the wheel element so vigorous. There is no class of workwomen on the face of the earth to whom the wheel may be so much a Godsend. No class of workmen need it more; and t no class can it bring more good.

The glories of the gymnasium pale before the wheel—and there are several reasons. We recognize them. There is the out-door element in the wheel-riding; there is the even, all-over muscular exercise; the induced activity of the skin, and the deepened respiration with all the means to the blood supply and consequent nutrition.

But among all these, I believe, the greatest good from the wheel comes through the play element in it. It is pure fun! It is a mental relaxation, an exhilaration, an uplift. It makes one feel like a child again. That is the universal verdict. And what teacher, pray, of five years' experience, wouldn't give all her future hope of larger salary just to feel like a child again?

I defy anyone to come in from a ten-mile run feeling worn and depressed. I defy anyone to feel like a schoolma'am on a wheel. Forty years are but as a day on a wheel, and we are all children together.

And if there is any agency in this modern civilization that can take the worn and depressed conditions from a teacher's nerves and put bounding youth in her heart again, is it not her duty, as well as her privilege, to ride?

Think how much better she will understand her children when she again feels herself like one of them. What a sense of good comradeship will spring up between her and the children? And this, we are told by the great educators, is what makes a good school always.

Let us, then, appropriate the wheel as peculiarly the possession of our profession. Let us welcome it as our own; a means of health; joy; and suited to those physical conditions that help to restore and conserve the nervous force of the teacher.

DEPARTMENT OF NATURAL SCIENCE INSTRUCTION.

SECRETARY'S MINUTES.

FIRST SESSION, BUFFALO, N. Y., THURSDAY, JULY 9, 1896.

The meeting was called to order at 3 p. m., in the hall of the Young Men's Christian Association Building, by Professor C. E. Bessey, President, one hundred and fifty being present. The Secretary introduced a resolution asking the Board of Directors for the sum of \$2,300 to enable the Joint Committee of the Higher and Secondary Departments to carry on their work. Seconded by Professor S. H. Gage, of Cornell University. Carried.

Motion was then made by Secretary Palmer that the incoming officers of the department be made a Committee on Natural Science Requirements to work either as a sub-committee of the Joint Committee of the Higher and Secondary Departments or in connection with them. Seconded by Professor Gage, of Cornell University, and carried.

Notice was given of a reception to the department on the evening of the same day, in the Young Men's Christian Association Hall.

Notice was also given of the successful organization of the New York State Science Teachers' Association, with a provisional constitution and the following officers:

President—Professor Simon H. Gage, of Cornell University.

Vice President—Professor Hargett, of Syracuse, N. Y.

Secretary and Treasurer—Dr. Barrows, of Buffalo, N. Y.

Addresses were made by President Schurman, of Cornell; Professor Bessey, of Nebraska; Professor Palmer, of Colorado; Professor Tuttle, of Virginia, and others.

The Secretary then gave a brief account of the organization of the Department of Natural Science Instruction in the National Educational Association, referring to the minutes of the Round Table as published in the annual report as the minutes proper of the preceding meeting.

The Secretary then introduced the Department President, Professor C. E. Bessey, of Nebraska, who delivered the presidential address on "Science and Culture."

Professor H. S. Carhart, of Michigan, then gave an address on "The Humanistic Element of Science."

The discussion was lead by Mr. C. J. Ling, of Colorado. He was followed by Mr. T. J. Morey, of Nebraska.

Professor P. C. Freer, of Michigan, then gave an address on "The Teaching of Beginning Chemistry." The discussion was led by Mr. Leviston, of Omaha, and was continued by Mr. W. H. Beach, of Milwaukee, and Dr. Miller, of Buffalo.

This was followed by a short informal address on "The Study of Science in Elementary Grades," by Professor W. F. Jackman, of Illinois. President Bessey then appointed as a Nominating Committee, Mr. Ling, of Denver, Chairman; Dr. Barrows, of Buffalo; Mr. Adams, of Detroit.

The session then adjourned.

SECOND SESSION.—FRIDAY, JULY 10TH.

The department met at 3 p. m., with President Bessey in the chair.

The first paper announced was "The Educational Value of Botany," by Professor John M. Coulter, University of Chicago. Professor Coulter being absent the discussion was introduced by Professor G. F. Atkinson, of Cornell University.

He was followed by Professor V. M. Spalding, of Michigan University; Dr. David F. Day, founder of the Buffalo Botanical Gardens; Professor Cowell, Director of the Buffalo Botanical Gardens, and Miss A. Isabel Mulford, of the Shaw Botanical Gardens, Missouri.

The second paper was then presented, "Zoölogy as a Factor in Mental Culture," by Professor Simon H. Gage, of Cornell University. The discussion was led by Professor Albert H. Tuttle, of Virginia, continued by Dr. Merrill, of New York State Museum, and Dr. Woods Hutchinson, of the Buffalo School of Pedagogy.

The chairman then called for the report of the Nominating Committee, who introduced a resolution as follows:

Resolved—That it is desirable that the principle of continuity should be recognized in the policy of the department, and therefore that one of the officers should be re-elected to the same office or some other office so as to hold over.

The committee then nominated the following officers for the ensuing year:

President—Professor Charles Skeele Palmer, of Colorado.

Vice President—Professor Albert Henry Tuttle, of Virginia.

Secretary and Treasurer—Mr. Irwen Leviston, Omaha.

Motion was made and seconded that the rules be suspended and the chairman be instructed to cast the ballot for these nominees. Carried.

A hearty vote was then passed extending the thanks of the department to the science teachers of Buffalo and of the state of New York, and to the retiring officers of the section, and to the Young Men's Christian Association of Buffalo, for the use of their building.

Professor Bessey, as retiring President, made a few earnest remarks on the work and duty of the department. The new President was then introduced, who made a few remarks, urging the necessity of condensation of work in science, and patience and harmony in working out our ideals.

The session then adjourned.

CHARLES SKEELE PALMER, *Secretary*.

PAPERS AND DISCUSSIONS.

PRESIDENTIAL ADDRESS—SCIENCE AND CULTURE.

BY PROFESSOR CHARLES E. BESSEY, LINCOLN, NEB.

It is with peculiar pleasure that I stand before this new Department of Natural Science Instruction, and I deem it a great honor that you have asked me to preside over its deliberations. It is an important sign of the times that such a department as this should have been organized by the scientific men of the country. It is significant of a broader view of the work of scientific men, that we find so many here today to take part in the first meeting of a department which has for its object the discussion of questions pertaining to the teaching of science. I am assured that the movement which culminates in our gathering today is timely, and that it is but the visible expression of the feeling which has been steadily growing among scientific workers, that the time is near at hand for a re-statement as to the place of science in the education of a man. I congratulate you that you are among those who are to take part in this movement, and I trust that great good will result from your efforts.

With your permission I wish now to bring before you at the opening of this department a few suggestions which may serve to give direction to your work.

It is not so long ago but that many of us have personal knowledge of the insignificant place accorded to natural science in the schools from the primary grades to the college. Afterwards there came a period of conflict between the advocates of science on the one hand, and of the old culture-studies on the other. In the controversy much was said which should have remained unsaid, and many arguments were brought forward which have long since been abandoned by both sides.

Thus, in urging the introduction of science into the schools, much was said regarding its usefulness, as in farming, in manufacturing, and in commerce. The usefulness of science in everyday life was brought forward as one of the strongest arguments for its introduction in the course of study in school and college. This was so emphasized as to lead some to hold forth the money-getting value of science as contrasted with the culture-value of the older studies. Thus there arose in the popular mind the notion that while science is more "prac-

tical," and while it may fit a man to earn a livelihood, it is lacking in culture-value. The notion has been fostered by the fact that in the building of technical schools science has been given a large place. In fact these schools are very commonly called scientific schools and colleges. When the educational world during the latter half of the present century saw the rise of engineering and mechanical schools, in which chemistry and physics were given great prominence; of agricultural colleges in which botany, zoölogy and chemistry occupied the greater part of the student's time; of schools of horticulture, schools of dairying, sugar schools, etc., in all of which one or more of the great modern sciences occupy a prominent place, — what wonder that Science seemed to be merely a servant to minister to man's material interest! What wonder too that some men, dazzled and bewildered by the splendid achievements of science in many fields of human industry, became materialistic, and set up science as their educational goddess! In this period we heard much of the "new education," and too often by this term was meant little more than is included in mere trade schools.

The "new education," while ostensibly an education in which Science replaced the language and literature of the older curriculum, very commonly included merely such sciences as were of immediate use in a particular industry, and too often only those portions of these selected sciences which were most directly "practical." To make the matter worse, the graduates of schools with such a curriculum were called bachelors of science. What wonder that some men looked askance at scientific courses to study! What wonder that college men, who had been accustomed to think of the culture-value, rather than the money-value of the studies in the college curriculum, should hold aloof from close association with such science!

Against such merely utilitarian views as to the place of science, there have been strong protests during all this period of educational unrest; but these have been little heeded. Gradually, however, with the increased introduction of science study in the schools and colleges, doubts have arisen as to the soundness of the utilitarian view. The question is often asked whether science is "useful" merely in the lower sense of contributing to man's material advancement. Our thoughtful students and teachers are asking whether science may not be pursued with profit by those who will not "apply" it in some industrial pursuit. May a man profitably give prolonged attention to chemistry, who does not propose to be a manufacturing chemist, an assayer or a maker of drugs? Is it a profitable use of the time of the college student to give years of study to the lower forms of vegetation, unless he hopes to become the botanist of some experiment station, or expert bacteriologist of a cheese factory or brewery? In

other words, is there a culture-value in these studies? May a man profitably pursue science for its culture-value, as one pursues the classics, literature, history and mathematics? Is a man made a better man, not merely a more efficient money-making machine, by the study of science? These questions are now being asked by teachers and students, and it is to help answer these that this department has been organized.

The making of a man today is a complex undertaking. Life is too short and knowledge too vast for us to think of furnishing a man with mere knowledge. No man can hope to master all knowledge. No man can hope to master all the details involved in the life of the community in which he lives, much less those of the civilized world. In the making of a man in primitive communities, little more was necessary than skill in hunting and fighting, with a few arts, all of which could be easily acquired by a few years of practice under the guidance of his elders. Today in the making of a man we must develop the almost primitive child with his limited horizon of knowledge and philosophy, into an alert, quick, accurate being, able to comprehend and classify the multitudes of facts, and to grasp and solve the many problems with which modern life is filled. We realize today that in making a man we must train him. We can no longer hope to acquaint him with all facts, but we may prepare him to classify and arrange them. And here perhaps is the best test of good training, of what we call culture; it is the ability to accurately classify. That culture is best, which so prepares a man that whatever fact presents itself to him, he will be able to arrange it accurately with reference to others. This ability to classify facts is of far more importance than the mere acquaintance with facts, however extended the latter may be.

May science help in such training as this? Can it contribute to culture? Must we still rely for culture upon the old studies only, or may we look to science for help? The answer to these inquiries should not be hard to give. In spite of the fact that science has been so badly treated, in spite of the fact that for so long its culture-value has been little esteemed, I venture to say that when properly presented it will stand second to no other subject.

In the first place, it must be clearly understood that nothing here said implies the substitution of the culture given by science study for that given by the classics, literature, history, mathematics excepted. We cannot spare that culture from modern life. But we need in addition the special culture given by science. The culture given by science must be supplementary to, and not substituted for the culture with which we have long been familiar.

Let the teachers of science make use of it as a means of culture

for students. Let teachers set forth the culture value of science study. Let us hear less in the schools of the practical value of science. Let us emphasize its vastly greater importance in the making of man. We are already familiar with some of the direct culture results; thus we know that through science study quickness and accuracy of observation are developed, and both eye and hand are trained to be the ready servants of the alert mind. In the pursuit of the higher lines of science the mind is trained to accurate generalization from secure data, and to an indefinite suspension of judgment in the absence of sufficient evidence. The proper pursuit of science should develop a judicial state of mind toward all problems.

Indirectly the pursuit of science leads to a higher appreciation of nature. As a man understands the meaning of the natural world his appreciation of its beauty and grandeur is increased. He is then led to entertain broader views of nature, and to see more clearly the relations of part to part. Finally he is led to a proper appreciation of his place in nature; possibly he is humbled by the certainty of his individual insignificance in the vast organism, but he is strengthened by the equal certainty that in his race he is the inheritor of all that makes for progress and advancement.

Men of this Department of Natural Science Instruction, shall we not make of science a help to higher culture, rather than an aid to mere material success? Let us give it wings, so that it may carry our pupils above mere earthly things, and not doom it to do no more than turn our spindles, haul our goods, and coin our money. While we rejoice in these material achievements of science, let us bear in mind that these are not of supreme importance. When we stand by the mighty Niagara we realize that it has an infinitely higher significance for man than the mere turning of wheels. Just as the solemn flood of water speaks to and stirs man's deeper thoughts, and makes him forget the wheel-turning power of the rushing torrent, so the profound contemplation of nature, through enlightened and untrammelled science, leads him away from sordid things up to the higher planes of thought and experience.

THE HUMANISTIC ELEMENT IN SCIENCE.

BY PROFESSOR HENRY S. CARHART, UNIVERSITY OF MICHIGAN.

The time has happily passed when the rival supporters of literary studies on the one hand and of scientific studies on the other slept on their arms, or engaged in open combat. Both sides were intent on victory, with no disposition to give quarter or to concede that the truth might not all be on one side. But when opponents have come to know each other better, they not infrequently abide by at least a tacit agreement to live as friends. We have now arrived at such a stage in educational history and practice. An occasional note of discord still comes from the few who refuse to be reconstructed; but the prominent figures in the old conflict are fast passing over to the majority, and the new generation is born with a more pacific spirit. The pursuits of peace are more liberalizing than the devastations of war. Hence the origin at first of a spirit of toleration, and then of equality and fraternity. It is now time to inquire about a common ancestry and community of aims and interests. The spirit of the times does not sanction narrow bigotry or unseemly dissension. Educational intolerance is now as much an anachronism as religious intolerance or martyrdom for conscience. It has come to be recognized that no one system of theology contains all the truth, and no one branch of human learning is the sole instrument of culture, nor does it possess the exclusive capacity of imparting power.

At the time of the revival of learning in the Middle Ages the apostles of the Renaissance, who introduced the study of classical literature, were called humanists. Hence humanism has often been called "the culture derived from classical training." But, more broadly, humanism is a system of thought in which the human element of interest predominates. The humanities, therefore, include much more than classical language and literature. They stand for philology, poetry, rhetoric, grammar and archæology, as well as for the Greek and Roman classics. "Philological studies," says G. P. Marsh, "were called *literæ humaniores*, the humanities, by way of opposition to the *literæ divinæ*, or divinity, the two studies, philology and theology, then completing the circle of scholastic knowledge which, at the period of the introduction of the phrase, scarcely included any branch of physical science." The humanities were not so named because of their peculiar value in producing culture, nor because of the human inter-

ests they fostered, but because they were human or secular in their nature, as contrasted with the theological or divine.

Ever since the revival of learning, philology and polite literature have been justly held in high esteem as instruments of culture and as the "literature of power." Generation after generation of English scholars and statesmen have received their intellectual training largely by means of mathematics and the classical languages. In modern times there have been added to these, subsequent to university residence, the acquisition of modern tongues and extensive foreign travel. In America the classics have furnished the major part of a liberal training to many successive classes of students. It is only within the past twenty-five years that science has come to form any considerable part of the curriculum of American colleges. It is not my purpose to detract in any way from the utility and value of literature, philology and philosophy as important components of a liberal education, but rather to show what the study of science has in common with the humanities as liberally interpreted by the broadest scholars. A high estimate has rightly been put upon the study of the humanities by the most prominent educators, and it is not necessary to undervalue their judgment for the purpose of advancing the cause of science. Whatever antipathy or opposition science has encountered has had its origin either in prejudice or in a lack of understanding of the aims, the nature and the content of any connected body of science. It is perhaps folly to try to remove the former, but a more refreshing task to point out what human interests are involved in the pursuit of science, and to what higher ministry a man's intellectual and ethical needs has been applied.

It may be well at the outset to clear away a misconception relating to the objects in view in scientific study and investigation. It is a gross libel on scientific men to assert that the chief end aimed at in the pursuit of science and the claims most strongly urged in advocacy of its cultivation are narrowly utilitarian or intensely practical. If worldly success were the only reward awaiting the scientific investigator but few branches of science would be fortunate enough to find their votaries. The taste for scientific research is a passion which finds its gratification in the truth it seeks. It can never be satisfied to con over the lessons of the past alone, but it restlessly pushes on into new chapters. The true scientific man recognizes the immense value of literary and linguistic study; he is also aware of the fact that the human intellect is many-sided and has numerous aptitudes. To be thoroughly developed, to have liberal sympathies, and to acquire the power to be master of circumstances, the educated man of to-day must know, not only language and literature and history and philosophy,

but he must have knowledge of his environment, of the physical law under which he lives, of the varied life about him, of the earth which he inhabits, and of the heavens spread out in magnificent panorama above him.

Languages are considered to be the humanistic studies *par excellence* because they are the product of human endeavor, the outgrowth of human thought, the chief exponent and index of evolution in the human mind. All language is therefore entitled to be included in the humanities. But all languages are not of equal interest and value. They are not all equally developed products, not all equally differentiated flowers of the human intellect. The greatest interest attaches to the languages of those peoples who have attained to the highest civilization; whose art, architecture, industries, literature and learning have reached the highest development; whose works, in short, possess the highest finish as the expression of human thought.

An important distinction may be made upon the subjects belonging in the narrower sense to the humanities. Language in its structure may be regarded as the involuntary product of human activity — the result of the unconscious struggle of the mind, its reaction against the environment, with the result of a definite attainment not aimed at. The results are not fortuitous, because all activity is under law. Whether the effort is conscious or unconscious, the result anticipated or unexpected, it must issue in accordance with the laws controlling human action. On the other hand, art, architecture and poetry are the conscious products of thought. They are the results of struggles after definite and well conceived ends. They are the issue of an inner impulsion toward an ideal attainment. They are not so much the finality of collective effort as the offspring of individual genius. The written language, the canvas and colors, the quarried marble and granite, are the materials with which art works and out of which it constructs a poem, a painting, a statue or a temple. They are compelled by poetic and artistic genius to shadow forth the ideals existing in the mind of the poet and the artist. The pigments and marbles are not art. It is the artistic use of language, of canvas, and of marble that requires the skill of the master. Then too the pen of the poet, the brush of the painter, and the chisel of the sculptor touch their highest point when they delineate that which is truest in life and nature softened with ideality and ennobled by aspiration.

Now what characteristics has science that ally it to literature and art? What have they in common which entitles science to be treated as one of the humanities?

In the first place, the materials which science uses are her own. It is this fact which differentiates science from other branches of

learning. But given the materials, the operations of the human mind in working on them are kindred in character and similar in result to those of the same order of intellect elsewhere.

It is an unworthy conception of science that makes it consist in the collection of facts about the material world, or even the higher animal life. These materials, it is true, must be collected, just as the pigments must be ground and the marble and granite must be quarried. But he who stops with the collection of facts is doing the lowest order of work in science. He contributes to the final result, but it requires genius to clear away the rubbish and to construct the temple of science out of the scattered materials. Or better still, the genius in science does not merely hew and shape and color, but he brings together the *disjuncta membra* formed by the hand of the Almighty, and reconstructs a beautiful body fit for the Creator to look upon. The most important element in science is the human element, that which vivifies the dead facts, fuses them with the fire of imagination, beautifies with the fine finish of ideality, and constructs an articulated system which must conform to the truth. Science is then in a very large sense a product of human thought, the result of human endeavor. A body of correlated scientific truth can hardly be studied apart from the personality of the names inseparably linked with it. It is scarcely less a human interest which draws us to it than that which attaches to language as the instrument of human expression. Indeed, the former has the added attraction of distinct personalities. It is the personality of a few master minds working with creative ability, impressing their own thought upon science, and marshaling facts in great divisions which embody their ideas of the order and dependencies of nature.

It is no new thought that scientific study makes a draft upon the imagination. This aspect of science allies it to art and literature. Music and mathematics have not infrequently been congeners in the same gifted genius, and mathematics is becoming an indispensable adjunct to every branch of science. Maxwell, perhaps the greatest modern physicist, often indulged in poetic composition, and his poetry was of no mean order. It may be readily granted that the scientific imagination is cultivated and strengthened by exercise in the related realm of poetry. The intricate and fascinating subject of electricity is greatly indebted to the imaginative faculty of the great discoverer in this field. It is an unfruitful science that has not been enriched by the scientific imagination.

In another respect science fosters human and ethical interests. It compels the restless struggle after ideals. It holds up an ideal condition which is the goal of its ambition, the one thing which it must

attain before it can rest content. Hence the scientific worker studies sources of error and seeks to eliminate them. By repeated attacks he approaches nearer and nearer to the citadel which he tried to capture. And after all is done he recognizes that the object of his endeavor had not been fully attained. It is much like the chase after the foot of the rainbow, which ever moves onward as it is pursued. Says Huxley: "Men are said to be partial judges of themselves. . . . Life seems terribly foreshortened as they look back, and the mountains they set themselves to climb in youth turn out to be a mere spur of immeasurably higher ranges when, with failing breath, they reach the top." But it is infinitely better to have reached the top of a spur even than never to have begun the ascent. The whole world has been called to a broader outlook and a grander vision by those who have reached the spurs and higher ranges. Their effort after ideals ennobles and humbles. It chastens while it subdues.

In some respects science is more humanistic than the humanities. Here and there ancient literature enforces the conception of the reign of law. It presents the human captive vainly prolonging the struggle to escape it. Tantalus-like, the unattainable ever eludes the seeker. Prometheus-bound is a fit symbol of circumscribed humanity. The same thought, which has always impressed itself upon the race and worn itself deep into human experience, is enforced in Holy Writ: "If I take the wings of the morning and dwell in the uttermost parts of the sea, even there shall thy hand lead me and thy right hand hold me."

Now science illustrates and emphasizes the reign of law. It has cleared away the mystical, the fortuitous, the anthropological, and has given us instead the orderly and progressive sequences of natural phenomena. It has in no way weakened the necessity felt for a First Cause, but it presents the activity of that Cause under a new and more rational aspect. It presents a Creator who sees the end from the beginning, who does not need to hold the world in leash or drive it with a goad, but who endowed matter with certain capabilities and infused into it divine energy, so that it can run its ceaseless changes down the grooves of time. Science has replaced a world of humanistic divinities by a world of energy and law. Instead of the caprice of classical gods and goddesses, it has supplied a physical organism devised and elaborated by infinite wisdom. Man has therefore learned to order his physical life so as to conform to the laws of the physical world; or if he elects to transgress those laws, he does not expect the interposition of humanistic divinities to effect his escape. So impressed is the human mind by the reign of law in the physical world that it has carried this conception over into the spiritual. "Natural law in

the spiritual world" is an obvious sequence of natural law in the physical world. It is, therefore, an intensely human interest that impels to the study of the reign of law.

Every great branch of learning has been adorned with the names of eminent scholars and discoverers. When we bear in mind that the arts and sciences are the product of directed, conscious human effort, and that it is the lot of but few to be endowed with the intellectual insight, the native sagacity, the penetrating perception to push far beyond their fellows, we are not surprised at the smallness of the number of luminous names that shine on the roll of honor, or that go down to succeeding generations as the great discoverers. The human interest in these names, differentiated from all others by their powers and their contributions to the progress of the world, is equally intense whether they belong to art or architecture, to literature or science. To these men it has been given to delight the soul with beauty, to penetrate the unknown, to enlarge the boundaries of human knowledge, and to gather up the tangled threads of thought and weave them into a tapestry of beautiful design. Each department of creative art or of learning is justly proud of the distinguished names associated with it. They all inspire the same human interest, and are characterized by the same passionate devotion. Galileo, persecuted and condemned for his scientific writings, is still a vivid figure, a living personage in history; and we look with reverence upon the old bronze lamp or candelabra, swinging on its long suspended rope in the Duomo at Pisa, as it swung centuries ago when Galileo watched it and discovered the isochronism of its pendular motions. Old Copernicus, turning over with death-stricken hands the first copy of his book on the solar system, which he dared not publish sooner, is a figure to excite at the same time sympathy and indignation. The genius of Michael Angelo still presides over the art and architecture of Rome, and Raphael will forever stand beside the glowing canvas of the Sistine Madonna, which burns itself into the soul of every beholder. One almost expects to see Scott standing within the deep shadows of Melrose Abbey by moonlight, or strolling with his faithful hounds in the woods about Abbotsford. Alloway Kirk and the Brig o' Doon are still visited by the strange creations of the busy brain of Burns. How sweetly the chimes of Holy Trinity Church ring out over the hills about Stratford-on-Avon on a quiet evening. Green are the fields and quiet the cottagers along the cleanly lanes and alleys where the great poet was born. In the spacious chimney corner of the Hathaway cottage linger the shades of Ann Hathaway and William Shakespeare. It is hard to believe that for 300 years the ashes of Shakespeare have

reposed beneath the slab in Holy Trinity, guarded by the famous couplet—

"Blest be the man that spares these stones,
And curst be he that moves my bones."

The scientific traveler in London turns his steps toward the Royal Institution in Albemarle Street, where the noble Faraday worked and achieved immortal renown. There are the coils and magnets and other appliances which his own hands fashioned; and Faraday himself is everywhere present there. How powerful still is the memory of our own Joseph Henry at Princeton, and Washington! Though he be dead, his works do follow him.

Professor Butler said, in his address at Denver: "We must enlarge our conception of the humanities, for humanity is broader and deeper than we have hitherto suspected. It touches the universe at many more points than one; and properly interpreted, the study of nature may be classed among the humanities as truly as the study of the language itself. This conclusion, which would welcome science with open arms into the school and utilize its opportunities and advantages at every stage of education, does not mean that all studies are of equal educational value, or that they are mutually and indifferently interchangeable, as are the parts of some machines. It means, rather, that the study of nature is entitled to recognition on grounds similar to those put forward for the study of literature, of art and of history." This position concedes the claim which I am now urging. It is an ancient chapter in educational history that places the humanities in one grand division and the sciences in another, without mutual relations or common aims and interests. The relative value of these subjects as educational material I am not now disposed to discuss, passing it with the remark that the order of excellence laid down will depend upon the standard of values assumed and the point of view of the writer.

It will not be inappropriate to make special reference to the study of physics in connection with the subject of this address. No one of the sciences is associated with a longer list of splendid names, none appeals more strongly to that characteristic of the human mind which searches into the causes of phenomena, none is more capable of serving directly human needs and of advancing the material interests of society.

It is almost the universal judgment that physics is a fundamental subject and more than any other is essential to the pursuit of other branches of science. In its historical development it is no less ancient and honorable than chemistry, while in recent times the proof that it has lost none of its vigor lies in the splendid discoveries that are almost unrivaled in any other department of scientific investigation.

It is, therefore, justifiable to urge that physics be made an essential part of every course of study in secondary schools, and that the place and time devoted to it correspond to its importance. It is not enough that physics be admitted to all secondary schools, but that it should not be there in a secondary place. It should be placed on an equal footing with the most favored subjects. It seeks no preferences, but is strenuous that no special bounties be extended to other branches. Whether it be considered from the point of view of its educational value, of its splendid achievements and its service to civilization, or of the interest that it awakens in the unfolding mind of the inquiring student, it should form as essential a part of every course of study as mathematics or history or language. First of all, a student should know his own language; it does not admit of question that he should also know the historical development of his own country; he should, in addition, be familiar with the fundamental physical principles and concepts which are as closely interwoven with his life and well-being as are his language and the history of the land in which he lives.

If now the pursuit of this noble science is to serve the human and ethical interests which we are contemplating, it is essential that its serious study be entered upon at the right period in the education of the pupil. It was very properly pointed out by Mr. Gage, in the report of the Conference of Ten on Physics and Chemistry, that "Physics requires the largest knowledge of mathematics that the secondary school affords, and the difficulty of this study demands the greatest maturity of mind." What interest can be served by placing it in the first year of the high school, except its subordination to more favored branches, it is quite impossible to understand. The Conference of Ten recommended "That physics be pursued the last year of the high school course." That recommendation meets the enthusiastic approval of every physics teacher whose experience is worth considering. The exigencies of the school programme sometimes require that physics be crowded down into the third year, but the instructor in this subject should never cease to protest against any further lowering of the standard by its relegation to the second year. When only a single year is sought for a subject of such transcendent importance, the studies that are crowded to the front from three to six years should be compelled, in all fairness and reason, to give way, if necessary, at the point where physics properly belongs. The pupil will then be provided with a requisite knowledge of geometry, so essential to the intelligent study of physics, and may be presumed to have that maturity of mind which will enable him to profit by the study.

The limits of this paper do not permit me to enlarge on the method

to be pursued in teaching physics. It must suffice to say that the student in the elements needs a text-book of principles for the purpose of securing accuracy and to enable him to dwell long enough on any portion to comprehend it. To the didactic work of the class-room should be added the method of the laboratory. Practical work acts like a mordant to fix the color which may otherwise be evanescent. It is the testing machine to determine the strength and toughness of intellectual fibers. It furnishes a scale by which to evaluate acquisitions. It is the method of original investigation applied to the student; he will not discover any new laws of nature, but he will discover his own ignorance and limitations.

THE TEACHING OF BEGINNING CHEMISTRY.

BY PROFESSOR PAUL C. FREER, UNIVERSITY OF MICHIGAN.

The momentous changes which have been brought about in chemical science within the past two decades are too often lost sight of in teaching the elements of the subject. It is easier to go on in the old way, the habit of descriptive chemistry, founded primarily on the atomic hypothesis, is too well established to be suddenly uprooted, and as a consequence in America we can see but little progress made toward a more rational and scientific means of beginning study. The reason for this unsatisfactory condition is most probably to be found in the history of the development of science during the present century. Gay-Lussac, Dalton, Berzelius, Davy, Faraday, and the other lesser lights who appeared upon the chemical firmament between the years of 1800 and 1826 were completely engrossed with the discovery of new elements, the determination of chemical equivalents and the relationships between these latter quantities and the atomic weights. It was then that our system of chemical notation originated, and for this, even if his name were not inseparably connected with other lines of advance, we owe a lasting debt of gratitude to Berzelius. Naturally at this time, methods of analysis in inorganic chemistry, both qualitative and quantitative, assume the greatest importance, for where the composition of so many new minerals remained to be ascertained, and when in each a possible new element might be discovered, such work must necessarily claim the attention of the foremost investigators. Scarcely an appeal was made to turn the science into broader channels—the material side was uppermost, the statics of chemistry was being investigated, and there was no time to think of the nature of chemical changes from any standpoint other than that of the trans-

portation of the matter. The voice of the great Berthollet was, it is true, raised in a demand for the study of the physical aspect of chemical change, while Avogadro explained the meaning of Gay-Lussac and Dalton's discoveries of the simple relationships between combining gas volumes, but both were unheeded, for the chemical field was not ripe for such development. During the latter part of the life of Berzelius, we find such investigators as Wöner, Liebig and Dumas busily engaged in building the new edifice of structural organic chemistry, and at the same time the tendency showed itself to unduly emphasize the importance of chemical symbols, for the theory of compound radicals with its numerous variations held most men in its grasp. Chemical bodies were classified according to arbitrarily constructed formulæ, regardless, oftentimes, of obvious family relationships, theory began to outrank careful observation, and even with so careful an experimenter as Berzelius, chemical formulation began to distort and replace ascertained facts. This chaos, produced by the clashing of minds, all equally qualified to dictate in the chemical field, was further heightened by the lack of any reliable scientific basis for the determination of atomic weights—there were almost as many systems as there were chemists. It was only after 1850, when Cannizzaro successfully revised Avogadro's hypothesis, when the laws of thermodynamics were established, and when the impulse toward a logical system of atomic weights was given, that some advance toward order was made. From this time on, owing to the labors of Kolbe, Williamson, Strecker, Gerhardt, Laurent and, finally, Kekulé, our present views of valence and structural chemistry began to take the place of former confusion. With the advent of the definite theory of quadrivalence of carbon—at first advanced by Kekulé, simply as a name of classification—a basis for united action was given which was eagerly seized on by all of the workers in the chemical field. Never before had so simple a theory been adopted and never before had one appeared which so heartily met with the approval of most men. So easily comprehended, indeed, were these views, that, as a logical consequence, chemists were carried too far in their enthusiasm; if the tetravalence of carbon were established, why was not a constant valence true of all other elements? Acting on the impulse, the classification into monads, diads and triads, etc., was made, often in utter disregard of easily observed facts. Theories were once more confused with the facts from which they were deduced, and an arbitrary method of chemical teaching, far removed from the basis on which physics rested, was inaugurated. The chemical symbol and chemical equation were given a rank and place far above their merits, and, as a consequence, the scientific axiom that all theoretical deductions must be founded upon carefully

observed facts, was too frequently lost sight of. Even Mendelejeff and Lothar Meyer, in their development of Newland's periodic system, were often tempted to force dogmatic classifications upon the chemical world. This tendency in chemical teaching has continued to the present day, and along with it we still have the undue emphasis laid upon analytical chemistry—a remnant of Berzelius's time—although the chemical field has been so widened that many other branches of the science have far outgrown the latter in relative importance.

Taking heed of the errors of the past, it is time to bring the teaching of chemistry to a purely scientific basis of experimental observation—to omit theoretical deductions, especially the atomic theory until such a time as the pupil has at his disposal sufficient material to give it a definite basis to rest upon.

There are two laws which are fundamental throughout chemistry. No matter whether or not we hold to the atomic theory, these would remain unalterable and by their existence would inevitably force the science to be a quantitative one. By leaving this basis, or ignoring it, while still keeping the atomic hypothesis in sight, even great chemists have been led to adopt the most impossible theories and to distort the most carefully established facts, as the history of Prout's hypothesis abundantly demonstrates. But, if the foundations of chemistry are quantitative, why not begin the study of it in such a way that this aspect is thoroughly and permanently brought out to the attention of the student. The difficulties in the way are not great, the necessary equipment for the work does not add a large outlay to those expenditures which all properly provided laboratories already have to meet, and in the majority of cases experiments for beginners can be altered from the qualitative to the quantitative ones by the simple graduation of a glass tube. The quantitative neutralization of acids by bases and vice versa, easily carried out with accurate results, is especially useful, combining as it does both the laws of definite and multiple proportions and the most striking chemical characteristics of two important classes of compounds. The study of the combining volumes of gases is also simple and necessary as leading up to subsequent important theoretical considerations. Only by following a course of accurate work can a proper basis be secured for future generalizations.

The atomic theory has no place in the beginning of the study of chemistry. The reactions which students encounter during the first period are as easily understood without it as with it. Its early use is confusing and pernicious giving, as it does, a visionary and immaterial basis for the science, which is too apt to cling to the pupil

throughout his subsequent course. Our belief in this theory has been brought about by the convergence of a number of lines of investigation which have made use of facts discovered both in physics and in chemistry, and it should be dealt with in this way. If we use it in any other, we are bringing ourselves back to the scientific standpoint of Aristotle, whose deductions were subjective and not objective.

Chemical formulæ are, of course, in their present meaning, founded on the atomic theory, and therefore are to be excluded until after the proper work has brought about their logical development. It is not, however, inexpedient to introduce a few symbols which represent not atoms, but equivalent weights which are so related as to be referred to one gram of hydrogen to a unit, for by this means an advantageous conciseness of expression can be obtained. So, to use a concrete example, it can readily be demonstrated that, by the action of certain metals on acids, a definite quantity of hydrogen is substituted by a given weight of each metal, and, if in such an experiment we select the unit weight of hydrogen as a basis of calculation, we have a means at hand of ascertaining the reacting quantities of the substances in question. These relationships are further exemplified by the experiments on neutralization, so that finally a few of the simple reactions can be expressed by a system of notation which is founded only on observed facts. In this way a basis is obtained for further enlargement and explanation when the time comes to introduce theoretical deductions, and thus the pupil can be brought to understand the scientific means by which our present system has been brought about. It is too often the case that students who have even had a somewhat extended chemical instruction, are only able to present their knowledge in a language of symbols of the fundamental meaning of which they have no conception—they are chemically helpless if they cannot have pencil and paper and are not allowed to express themselves in the form of chemical equations. It must be confessed that the teachers are more responsible for this state of affairs than the pupils, because in many text books and laboratory manuals we find, possibly for the sake of a mistaken idea of saving printer's ink and paper, directions, paragraph and chapter headings given in the shape of chemical formulæ to a beginner of the science. The current language was constructed for chemists as well as for other mortals, and I see no reason why we should not express ourselves in its terms. The pupil should be able to tell us what he knows, and he should not be wedded to his writing materials.

The phase of chemical investigation has made such enormous strides of late years that it can no longer be ignored, even by beginners in the science. I refer to so-called physical chemistry. From

the start the teacher and pupil must recognize that there are two enduring things in the universe—matter and energy, and that but half of the tale has been told, when, in studying a chemical change, only the former has been considered. Of course, it is not possible in all cases to consider the latter; none of us are, as yet, able to do that, no matter how great our experience or how much we have worked in this line; but in the simple reactions which are encountered at the beginning of the course, the question of energy changes can be dwelt upon as clearly as the others. Such a line of work requires a certain knowledge of physics and, "as chemistry is a branch of the study of the relations of matter and energy, it should be preceded by the more general aspect of this subject which is undertaken by physics. Obviously, owing to the close connection between chemistry and physics, it will frequently be required to more clearly outline physical topics in chemical work, and to enable the teacher to make such outlines, a preliminary general knowledge of physics is necessary."* Another topic in physics which must necessarily be introduced before the atomic hypothesis is taken up, is the kinetic gas theory, for a comprehension of which some knowledge of elementary energetics is necessary. It is very easy to make the pupil learn the dogmatic statement that in equal volumes of gases, under like conditions of temperature and pressure, there are equal numbers of molecules; but to make him understand why this fundamental theory is accepted by the scientific world, and what is its bearing on our present system of atomic weights requires careful reasoning and conscientious teaching, without which the dogma becomes as useless as any other empirical utterances. In short, I would have the pupil's preliminary work, both physical and chemical, so centered around observed facts that he will approach his theoretical conclusions with a mind free from bias, and so logically trained in the successive steps that he may enter upon his more difficult task in a condition to comprehend its full meaning and significance. It is desirable that he should feel the need of some such theory as the atomic theory before the teacher shows him the way for its development.

Double decomposition and phenomena attendant upon it have lately come to be among the most important topics in physical chemistry. This subject must be introduced in an elementary course, but the present state of the science forbids that it shall be treated from an empirical standpoint, in which the most important fact is the obtaining of a precipitate which can be made to serve the purpose of identifying some chemical individual. These chemical separations are sim-

*Extract from a report made by a committee consisting of Messrs. Noyes A. Smith and Freer, at the Conference of Chemists of the Northwest, Jan. 22, 1896

ply particular cases incidental to certain conditions obtainable in a series of general phenomena, and as such they should be treated. An elementary knowledge of chemical equilibrium, or dissociation in solution, of the separation of ions by the electric current and of the modern views of neutralization is now as essential, as to the beginning of chemistry, as any of the descriptive portions. Armed with such a knowledge the pupil can approach many subsequent facts, which were formerly simply memorized, from a reasoning standpoint.

To render such a course of study as I have outlined successful, it is necessary only to take up but a few of the more common elements and compounds, doing the work thoroughly and conscientiously. Important chemical deductions are as well illustrated by a few widely distributed and simple substances, as by many. The time for the study of all the elements and of their relations in the periodic system is not in the beginning. Such work can only be undertaken in a scientific spirit, when the pupil has been taught to reason in the terms of the science. A mass of descriptive detail, no matter how well it is memorized, is not chemical science—the time is passed for that—we are no longer in the age of Berzelius. For the same reason I would leave the subject of valence for a later period. The reasons for its acceptance are many and complicated; they are the result of painstaking work, of much bitter strife and heartburnings, and are too intricate for the beginner. I have much more faith in the pupil who has been trained to accurate observation, who can logically connect what he has seen and who can tell what he knows, than in the one who, by a system of arbitrary instruction, can write down any number of chemical formulæ and equations, founded on a dogmatic and too early discussion of the theories of valence. Are not even the most brilliant investigators in the science in doubt as to its present position, and as to its future development?

In conclusion, I would like to answer the argument that I know will be brought against me. It will be said that while the outlined course is well adapted for those who wish to make a life study of chemistry, it can scarcely be applied to pupils who will never take any more chemical work than that given in the elementary course. It is absurd to suppose that an elementary course is intended to produce a chemist. The most that can be done is to give the beginner some knowledge of the fundamental principles of the science. Such being the case, how can we best give the pupil the mental discipline incidental to the scientific habit of thought and at the same time put him in a position to go on with his work in chemistry, should he so elect? Surely not by taking incidental facts from the entire field by introducing him to theories which he cannot comprehend, and by burdening his memory

with a mass of material which disgusts him with the science and leaves him helpless for future advancement. We must always take pains, in teaching beginners, to pick out that which is absolutely essential to their comprehension of the science as such, and even if we use only such materials, we will find that the allotted time is more than filled. We must not depart from our ideal of scientific truth to meet a demand which we recognize as not in the interests of the science. By failing to teach the pupil the true elements of chemistry, and by attempting to make the course, as it is termed, "practical," we are in reality doing the most impractical thing imaginable — not at all teaching the real science of chemistry, besides stunting the pupil's future scientific growth.

Above all, we should compel our students to observe accurately, and never to put their conclusions in their note-books until they can base such conclusions on what they have seen. I have known of teachers who require their students to balance large numbers of equations outside of the laboratory and according to set rules, and thus entirely subvert the purpose of chemical notations, which is, at its best, but a short means of expressing observed chemical facts, and as such should only be used in the laboratory as a means of describing what the student has actually seen. The former course leads the beginner to the conclusion that chemical reactions must actually take place exactly as the equation demands; the latter teaches him to observe actually and to express his observations in the terms of the science. Finally, I regard such work as this fitted only for advanced students — the chemical equation has but a small place in the beginning study of chemistry.

DISCUSSIONS.

MR. LING, leading the discussion of Professor Carhart's paper, emphasized the necessity of requiring only work which the student is capable of doing thoroughly and of requiring that very thoroughly.

MR. T. J. MOREY said if we put physics in the first year, we teach it to fifty pupils, in the second year to thirty, in the third year to twenty and in the fourth year to ten. Professor Carhart answered by saying that in Detroit this objection was met by attempting an ideal course of physics and advised putting physics as late in the course as possible.

MR. LEVISTON led the discussion of Professor Freer's paper and referred to the subject of physics, a question having been handed up from the audience, namely, "What subjects in physics may be profitably taken up in the elementary school?" Mr. Leviston advised problems in measurement, weight, form, in connection with geometry, perhaps specific gravity; would not study molecular

physics before the eleventh grade if possible to avoid it. Mr. Leviston, referring to the fact that he was not a special teacher of chemistry, recommended, however, the so-called "sandwich plan" of merging physics and chemistry.

Mr. W. H. BEACH, of Milwaukee, said: We can learn much by our mistakes. As a student I learned many things that I could not understand, because I had not seen them. Many of our text-books are beyond the capacity of the students who used them. Physics is very often taken up at too early an age. One of our best educators advocated "the spiral method of instruction" by which the range of the subject grows gradually higher and broader, coming back to the same thing again and again. In this way we may teach nature studies, even in the lower grades, by means of a lesson a week, or an occasional talk at the close of the session.

Dr. MILLER then spoke, saying that if the Herbartian system was carried far enough it would convert a man into a marble statue without a heart. The personality and the knowledge of the teacher is more important than the text-book. Enthusiasm is a strong factor, and is best imparted by an enthusiastic teacher. The student must be taught the power to reason, and the teacher must not forget the plane upon which the student stands. The teacher of science seeks only to construct a framework for future achievement.

PROFESSOR JACKMAN was then called upon, and in discussing science teaching in the elementary grades, emphasized this as the legitimate part of the work of the department. There are no hard and fast lines between elementary and secondary work. The growth of true conceptions of nature should begin early in childhood. The child comes to school with the ideas of fixedness and annihilation. It takes a revolution to overthrow these conceptions and to give the child truthful ideas. If we allow these false conceptions to grow in the child's mind, we make a mistake which cannot be corrected in the high school by smiting him in the face with definitions. The method is of more value than the material in teaching the child according to some authorities. But this must be wrong. Does the high-school work answer for the pupil the questions which nature is asking out of school? If possible, high-school work should deal more closely with the experiences of a pupil. The laboratory should be placed where the student finds answers to the questions in his mind.

PROFESSOR G. F. ATKINSON, of Cornell University, said: Years ago botany was regarded as an informational study. The educational feature in botany began with the introduction of the laboratory method. The best knowledge of the plant and its development comes only from the study of the plant itself. Laboratory work also leads to the comparison of different plants, soils, and environments. These processes of investigation have a distinct educational value aside from their informational value. As we study plants more minutely, we realize how little we know about any plant. The method which a student employs in plant study, is of value in all departments of life. The student discovers certain relationships in organs and parts, which seem at first entirely different. The process of discovering these relationships, is of great value to the student.

Botany is regarded with disrespect by many pupils because not properly taught. Professor Coulter characterizes the method too often employed in botany as nothing more than "Chasing a woodchuck into its hole." It is often best to tell the student at the start the name of the plant that he studies. The name is but a small thing. Relationship, development, morphology, are the important questions. The study of these questions have true culture value. If bot-

any is studied in the right way, it possesses educational value whether studied for money or for culture. All those who expect to teach botany should master some phase of the subject, not for the money there is in it, but for the value that all this body of facts will have on their own lives. The student becomes so absorbed and interested in the science that he forgets the money.

It seems strange that now anyone should have to argue for the educational value of botany.

In most colleges and universities advantages are offered for the study of the purely scientific side of botany. This is sufficient evidence of the culture value of botany. Cornell university pre-eminently illustrates the value of botany and other sciences as is shown by its recent action in regard to the requirements for the bachelor's degree. Other evidences are abundant. The Regents of the University of New York allow an option between languages and mathematics, and the sciences, including botany, thus recognizing that the sciences have their culture value as well as other branches.

PROFESSOR V. N. SPALDING, of Michigan University:—It was formerly said "Nature study has been tried and found wanting." This is not so. Again we have heard it said, "There must first be a love of a subject." Often this is not so; for frequently the love of a subject comes in the progress of the study. Again we have heard that "Man is the center of all things;" but this is not the attitude of the modest student.

There should be some science training before the high school to prepare the student. In Germany the children learn the names of the trees, the habits of insects, etc., in their outdoor lessons. We must somehow bring the student in contact with nature. This is a means of training the eye and hand.

We must see that the student expresses what he sees. He often fails in this. Let the teacher go from table to table in the laboratory and examine with the student what he has been writing in his book. How many can go into a crowd and tell a true story of what has happened? Very few. They lack the right observation, such as the study of botany cultivates. Botany heightens the appreciation of pure truth. Students learn that it is essential to know the exact truth. Dr. Asa Grey used to speak of species as "judgments." The study of botany induces a judicial attitude. We must encourage the judicial attitude, but by and by there should be a decision. Let us see that sometimes the student sees and knows something.

The sense of duty as "the eternal fitness of things" is cultivated by botany. There is no subject better fitted for this purpose. No subject is better adapted to the hand of the everyday teacher to bring out the great fundamental ideas of science. The student learns that things have become what they are. The great ideas of modern scientific thought are founded on this idea of development.

The culture-value of botany should be emphasized. Botany has its economic value also, but this element should not have undue weight in the study of the pure science. There is a well-known toast to pure mathematics—"May it never be of any use to anybody!"

DR. D. F. DAY, of Buffalo, said: The science of botany stands on the same plane as all other sciences to those who pursue it properly. Those who simply learn a few names are not botanists. They may have followed the "woodchuck to his hole," but they have not caught it, examined it, or learned its habits. They have only the key to the science.

PROFESSOR J. H. COWELL spoke of the Botanical Garden at Buffalo as offering the opportunity for the broadest study of the science.

MISS A. I. MULFORD, of the Missouri Botanical Gardens said that she had taught teacher-classes in St. Louis, using whatever material could be found in the season. The central idea of her teaching is that all parts of the plant are instinct with life. The germination of the seed is a fact of the greatest interest to a city child and can be cultivated in winter. Plant study is valuable to a child as language lesson. The child must speak truthfully of what he sees. The laboratory method may be taken up in later years with valuable results.

ZOÖLOGY AS A FACTOR IN MENTAL CULTURE.

BY PROFESSOR SIMON H. GAGE, CORNELL UNIVERSITY, NEW YORK.

It is not my purpose at the beginning of this address to weary you with apologies. I wish simply to pay my tribute of respect and admiration to the great zoölogist and still greater man, David Starr Jordan, whom I, with you, hoped to hear this day.

It is with regret that we miss his noble presence and speech, but there is also an element of gratification, for he is the fittest possible representative the government could have chosen as head of the commission to investigate the seals in Alaskan waters, and thus to furnish the definite information upon the basis of which the two foremost nations of the globe can honorably unite in a common cause.

In the able addresses which have preceded there has been shown with great clearness and force how the mind of man, cultivated by the disciplines of physics, chemistry and botany, has been made fitter to yield the flower and fruitage of noble effort. What then has zoölogy contributed, and what is it likely to contribute when used as one of the agents or means in the cultivation of the mind! And as with the agriculturist, every factor is of interest which can serve in adding to the productiveness of the soil and the quality of what is produced, so to us, mind or soul culturalists, every factor in mind culture is of vital interest. What then is this zoölogy which is spoken of as a factor in mental culture? As botany in its broad sense includes everything known and knowable concerning plants, so zoölogy includes everything known and knowable concerning animals; or as botany is plant-biology, so zoölogy is animal-biology, and deals with the form, structure, activities, development and classification of animals and their economics or relations to each other and to man. And if we include *Homo sapiens* among the animals, it will be seen that if man and his doings are a part of zoölogy, zoölogy, like every other center of knowledge and investigation, reaches out to infinity in every direction like the rays from a luminous point.

Although most of us are engaged in the profession whose high aim

is to aid in starting the young on the road that leads to a truly liberal culture, it may perhaps be best, before discussing the part which zoölogy has taken and may take in liberal culture, to understand distinctly what is meant by culture or education, and especially by liberal culture. It seems to me that no one has so well pictured the ideal liberal culture or education, or has realized it more surely in a noble life than the great zoölogist, Huxley. Hear his definition: "That man, I think, has a liberal education, who has been so trained in youth that his body is the ready servant of his will, and does with ease and pleasure all the work that, as a mechanism, it is capable of; whose intellect is a clear, cold, logic engine, with all its parts of equal strength, and in smooth working order; ready, like a steam engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind; whose mind is stored with a knowledge of the great and fundamental truths of nature, and of the laws of her operations; one who, not a stunted ascetic, is full of life and fire, but whose passions are trained to come to heel by a vigorous will, the servant of a tender conscience; one who has learned to love all beauty, whether of nature or of art, to hate all vileness and to respect others as himself."

What has zoölogy done to make such culture possible? First and foremost, it has aided most powerfully to render free the human mind; and without freedom no human soul can enter into the fullness of its kingdom; the true glory of this kingdom is not for slaves.

At the present day no Cæsar on the banks of a Rubicon would make his crossing depend upon the omens gained from the flight of birds. We do not decide upon attending the meetings of the National Educational Association by the key in which the wolf howls or the quaver of the owl's hoot. We no longer expect our acquaintances to imitate the transformations of the companions of Ulysses in the palace of Circe, no matter how appropriate such transformations might be. No longer do we expect to see birds and beasts produced in the fruits of trees or from decayed wood washed up by the sea; nor do we think that bees and other insects are generated by decomposing flesh. We know that no living thing exists without having received its life from a living parent like itself. Our path is no longer beset with hippogriff, basilisk or dragon, and our high hopes and noble aspirations are no longer at the mercy of fairies and genii. Living beings, as well as lifeless matter, are subject to law. "Thus far and no farther," applies to them as to the waves of the sea or the rush of a comet. The fairies are fled, the genii banished, the mermaid and the remora are captured, classified and harmlessly repose as objects of curiosity or in-

struction in the great museums. Zoölogical truth has freed us from their slavery.

Now that freedom has come, how shall this subject be made an efficient means of mental culture, and what will its fruit be? In the first place, as for the subjects, the discussion of which has preceded this, Nature herself must be interrogated. The successful student of zoölogy, to quote again the trenchant words of Huxley, "absolutely refuses to acknowledge authority as such. For him, skepticism is the highest of duties, blind faith the one unpardonable sin. And it cannot be otherwise, for every great advance in natural knowledge has involved the absolute rejection of authority, the cherishing of the keenest skepticism, the annihilation of the spirit of blind faith; and the most ardent votary of science holds his firmest convictions, not because the men he most venerates hold them; not because their verity is testified by portents and wonders, but because his experience teaches him that whenever he chooses to bring these convictions into contact with their primary source, nature, whenever he thinks fit to test them by appealing to experiment and to observation, nature will confirm them. The man of science has learned to believe in justification, not by faith, but by verification." To complete this first law in the Decalogue of the scientific student, it should be followed by this from his address upon Descartes' Discourse: "When I say that Descartes consecrated doubt, you must remember that it was that sort of doubt which Goethe has called 'the active skepticism, whose whole aim is to conquer itself;' and not that other sort which is born of flippancy and ignorance. But it is impossible to define what is meant by scientific doubt better than in Descartes' own words. He says: 'For all that, I did not imitate the skeptics, who doubt only for doubting's sake, and pretend to be always undecided; on the contrary, my whole intention was to arrive at certainty, and to dig away the drift and the sand until I reached the rock or the clay beneath.'"

In this spirit, then, of reverent skepticism, of scientific doubt, must the teacher of zoölogy teach and the student learn. And if this is the spirit, the teachers are but elder brothers a little farther advanced, knowing a few more of the delusions and pitfalls which beset the way. Teacher and pupil work together—the one inspired by the great works of all his predecessors and by nature herself, and he in turn inspiring and helping the student in his efforts. Such teachers, such pupils and such inspiring surroundings are described by Agassiz in his notable address upon Humboldt: "I was a student at Munich. That university had opened under the most brilliant auspices. Almost every name on the list of professors was also prominent in some department of science or literature. They were not

men who taught from text-books or even read lectures made up of extracts from original works. They were themselves original investigators, daily contributing to the sum of human knowledge . . . and they were not only our teachers but our friends. . . . We were often the companions of their walks, often present at their discussions, and when we met for conversation or to give lectures among ourselves, as we constantly did, our professors were often among our listeners, cheering and stimulating us in all our efforts after independent research. My room was our meeting place—bedroom, study, museum, library, lecture-room, fencing-room—all in one. Students and professors used to call it the little academy. . . . It was in our little academy that Döllinger, the great master in physiology and embryology, showed to us, his students, before he had even given them to the scientific world, his wonderful preparations exhibiting the vessels of the villousities of the alimentary canal; and here he taught us the use of the microscope in embryological investigation.”

A rare privilege is it, my fellow-teachers, to be not only teachers, but friends to our students. For Agassiz, Humboldt and Cuvier were his teachers and friends; for Darwin, were Henslow and Sedgwick. Darwin paid his debt of gratitude by never turning a deaf ear to an inquirer; and in the “Origin of Species,” the “Descent of Man,” and his other works, he becomes a companion to all of us and takes us into his confidence. And Agassiz, what shall we in America not say in gratitude to him! Who like him breathed confidence into the ardent young men who are now bearing the burden and heat of the day in the noble onward march of American science? Who like Agassiz showed us our rich inheritance and inspired this New World to arise and take possession of its own? As in holiness, so in literature, so in science, it is the living gospel, the living teacher whose inspiring touch awakens a spirit that thenceforward can never repose in idleness and indifference, but with a noble enthusiasm ever presses onward.

But, after all, the student comes back in his own mind to the serious personal question: How shall I begin; what can I do to gain this mental culture? Though the practice is difficult, the theory is simple. Observe, study, reflect. But reflection must always follow the others or there will result only empty subtleties, while without reflection, observation and study are barren and fruitless. Perhaps it is unnecessary to add that zoölogical culture does not come from the study of a fourteen weeks’ course, prepared by a man who does not know the subject at first hand. Learning the names and a little of the structure and some of the habits of a few animals is not zoölogical culture, although it may be a beginning. It is such a beginning as learning the Greek alphabet is for the appreciation of the immortal

epic of Homer and the whole glorious array of Greek art and literature. Or it is such a beginning as a knowledge of the multiplication table is for mathematics. I have thought sometimes that in our enthusiasm for scientific study we have cut and trimmed and selected for our fourteen weeks' courses till verily when our students ask us for bread we have only a stone to offer.

Did Darwin think out natural selection and the survival of the fittest, or Agassiz the glacial theory in fourteen weeks? Not every pupil can spend twenty-eight years or even a tenth of that upon a single subject; it nevertheless remains true that the mental culture gained by the study of zoölogy will, as with other disciplines, depend first upon the original power of the student,* and second upon the time and energy devoted to the subject.

If we take some of the aspects under which zoölogy may be considered, as anatomy, physiology, embryology, classification and economics, and think for a moment what is involved in understanding them, perhaps it will be clear why it is so insisted upon that to gain true mental culture from zoölogy time is required. Time for observation and study, and, after that, time for reflection, so that there may be assimilation and some kind of real comprehension of the subjects considered. And I take it that in the comprehension gained lies the very pith and marrow of whatever culture zoölogy can give.†

If anatomy is considered, what a field is there for observation and study. This animal machine with its muscles and nerves, digestive system and brains, bones and sinews; what nice adaptations they show for their various purposes, and to the far seeing eye how many

*The original ability of the student is mentioned prominently in this paper because in too many discussions upon subjects for culture, teachers and methods, it seems to be assumed that, given a proper subject of study a good method and an expert teacher, the desired result will be attained. That is, the material upon which the teacher works is tacitly left out of the count, and the teacher is blamed or the method or subject is condemned if cultured men and women are not turned out regardless of their ability. It is a historical fact, however, that with good or poor teachers or with no teachers, with good or poor methods or apparently with no methods, and with a great variety of subjects, cultured men and women have appeared in all ages. Subject, method and teacher are only helps that the student uses according to his ability, and important as the helps are, the result depends infinitely more upon the native ability of the student than upon the helps. Subject, method and teacher cannot create they can only modify or facilitate development.

†It is not for a moment claimed that so thorough a study of zoölogy as is here advocated is the only way to obtain *useful* information concerning the animals upon the earth and in the water. To continue the comparison used in the text, a little knowledge of Greek is useful in studying astronomy, and for gaining a better appreciation of English words derived from the Greek, but no one claims that such elementary knowledge is Greek culture. So information concerning edible fishes, mollusks and the ordinary four-footed creatures, a knowledge of poisonous snakes, useful and harmful insects, and many other practical and useful things, may be known about the animals, but that is not the knowledge that makes culture, although the profounder knowledge advocated in this paper and which comes with culture in zoölogical science includes this which in itself is merely practical and useful. Real science or culture gives foundation principles which alone make applied or useful knowledge possible in the higher fields. While I believe most thoroughly that zoölogy for culture is a very serious subject and one requiring much time as well as much observation and reflection, it is not desired for a moment to discourage the study of zoölogy, or indeed any subject, for purely utilitarian or practical purposes. While indeed such knowledge cannot be called culture, it is often true, as aptly stated by Prof. Atkinson in discussing this series of papers, that study for purely utilitarian purposes is very likely to lead to the higher kind of study which does make for culture.

bungles and compromises there are too. As compared with the machines made by human hands the animal machine is as a printed volume to a simple diagram. In these archives are stored the history of the past, the ascent or the descent from something different, but like the manuscript that has been written over and over after partial erasure, so is this structure clear only in part. Some words have been spelled out, but the master to decipher the whole manuscript is yet to appear.

And physiology, that is, the activities of the living animal, how beautiful they are, how diverse. The mother love that saves the world, the mighty thought of Newton or Shakespeare are somehow bound up with or in this living matter whose chemistry and physics even, still almost wholly elude us.

Then if we turn to embryology and try to trace with patient care the work of the unseen artificer who arranges the apparently simple and almost structureless mass of the ovum into heart and brain, muscle and nerve, and changes the formless into forms of beauty and power, be it butterfly, bird or man, we cannot but receive culture and uplifting; for are we not seeing with our own eyes what is described in the sublime words of the Psalmist: "I am fearfully and wonderfully made . . . My substance was not hid from thee when I was made in secret and curiously wrought in the lowest parts of the earth. Thine eyes did see my substance, yet being imperfect: and in thy book all my members are written, which in continuance were fashioned when as yet there was none of them."

Classification requires knowledge of all the above, for it is an arrangement in due order of the complex beings of the earth from the microscopic animalcule to the mighty elephant. For the classification to be successful the mind must see the true relations between all the forms, must know their structure and activities and how they were curiously wrought and transformed from generation to generation for unnumbered ages; in a word, the classifier must know their evolution; or, in the noble words of Agassiz, he must 'become the translator of the thoughts of God.'

And lastly we come to the economics of zoölogy, that is, the relations of the animals to the earth, the plants, to one another and to man, and his relations to them. Here one is brought face to face, not merely with the glory of living, thinking and acting, but with destiny; with the solemn fact of life *with* death, or, more truly stated, life *by* death. More are born than can possibly survive even the short span granted for the typical life cycle. Indeed, it almost appears as if nature in her efforts for life had become a Moloch of death. How graphically Darwin has painted the picture of this scene of strife, the

plant crowding its neighbors to get a little more sunshine or nutriment, the animals crowding each other and devouring both the plants and their fellows ; and then there is the whole foul brood of animal parasites. In these latter days we know also that the plants are not simply content to strive for sunshine and soil in order to elaborate from the inorganic world the compounds that alone make animal life possible, but in turn, a multitude of them, which no man can number the bacteria, are devouring the animals, including man. The knowledge of this fact, so largely due to the great Pasteur, has given new significance to hygiene and a new meaning to cleanliness.

This death and disease of the animals by means of the pathogenic germs, which also bring disease and death to man, has put a new aspect upon man's relations with the animals. They are indeed his kin, and *zoölogical economics* may almost be said to have become dignified into *zoölogical ethics*. None stands or falls alone. The earth is the mother of us all, but she bestows her gifts in a very roundabout fashion sometimes. The soil, air and sunshine of Montana may furnish the conditions for the grass; the old world gave the foundations of the life which we now find realized in perfect form in the sturdy beeves which grow and fatten on the Montana grass; and finally, without a thought of the sun, or the soil of Montana, or of the life which they made possible, or of the fear and suffering which may have resulted, we calmly nourish ourselves on the beefsteak while discussing politics, education or the hereafter. But often enough to take away undue indifference, the beef or other food may contain the germs of what is death to us, although it may be teeming life to the germs; and there is forced upon us a consideration of our relation with our living environment. If knowledge and reflection are sufficient, it does not take a very great philosopher to see that the economical standpoint changes with the change of organism. For the plant, the sunshine, the soil and the rain are for it. For the plant-eating animal, sunshine, soil and rain are to produce the plant for it. And from man's standpoint, all are for him; but if we change the standpoint slightly and judge of the workings of a tiger's mind by its actions, we would see that sunshine, soil, rain and dew, the plants, the fat beeves and even man himself are for the tiger's sole benefit.

Surely if the other sides of zoölogy call for imagination, acute observation, profound study and cold, logical reasoning for their comprehension, this side demands all these and, in addition, a philosophic spirit, that flower of the cultivated human mind.

I think what has been said will suffice to show that in zoölogy there is a factor of true mental culture; and that by it the philosopher, the philanthropist, the man of affairs, is better fitted in his own sphere

for work and for leisure. If the student feels that some of the inspiration to this culture has departed, that the structure, function, embryology, classification and economics of animals have been almost all discovered and determined, and may be found in the ponderous volumes and monographs in the great libraries, refer him to Aristotle, Darwin, Dana, Gray or Agassiz, or to any of the devoted men and women who have been and are trying to find out the truth and to follow it. They will say: Be of good cheer and not faint-hearted. Look and listen with brain as well as with eye and ear, for on every side are thrilling sounds whose music no human ear hath heard, and sights whose exquisite beauty no human eye hath seen.

In closing this address I cannot summarize my belief in the cultivating power of the earnest study of zoölogy better than by saying that a profound contemplation of the factors in the problem of animal life on the earth will bring out and cultivate the mind. It will show man his true relations to his fellow men and to his lowly fellows, the animals. It will not fill the mind with pride, for ultimate knowledge is as yet unattainable; it will rather give the humility expressed by Job: "Canst thou by searching find out God? canst thou find out the Almighty unto perfection?" or by Newton: "I do not know what I may appear to the world; but to myself I seem to have been only a boy playing on the seashore and diverting myself in finding now and then a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me." And another from one of the foremost physicists of our own day, Sir William Thompson, at the jubilee of his appointment as professor of natural philosophy at the University of Glasgow: "One word characterizes the most strenuous efforts for the advancement of science that I have made perseveringly through fifty-five years; that word is failure; I know no more of electric and magnetic force, or of the relations between ether, electricity and ponderable matter, or of chemical affinity, than I knew and tried to teach my students of natural philosophy fifty years ago in my first session as professor." Yet there is also the pæan, if not of victory, of the consciousness of power that comes to him whose mind has been truly cultured by the disciplines brought before you is this series of addresses and none has a surer right to that consciousness or with a surer voice has expressed it than the zoölogist in whose place I stand to-day: "The world of thought and the world of action are one in essence. In both truth is strength, and folly and selfishness are weakness. Say what we may about the limitations of the life of man, they are largely self limitations. Hemmed in is human life by the force of the fates; but the will of man is one of the fates, and can take its place by the side of the rest of them."

DEPARTMENT OF SCHOOL ADMINISTRATION.

SECRETARY'S MINUTES.

FIRST SESSION.—BUFFALO, N. Y., WEDNESDAY, JULY 8, 1896.

The first session of the Department of School Administration was opened at the Woman's Union Hall, by Dr. J. M. Clark, of Detroit, who acted as the Chairman. Wm. George Bruce, of Milwaukee, acted as the Secretary in the absence of J. M. Moreton, of Salt Lake City, Utah.

A telegram of greeting from the Associated School Boards of Wisconsin, signed by Wm. Meyst, its president, was received and read.

The opening address on "The School Board Convention Idea," was delivered by Wm. Geo. Bruce, Editor of the *American School Board Journal*.

Addresses were also delivered by President R. L. Yeager, of Kansas City, Mo., on "School Boards, What and Why," and by Wm. S. Mack, Aurora, Ill., on "The Relation of a Board to its Superintendent."

A discussion of the last paper then followed.

A Committee on Nominations was appointed as follows: Mr. Kiely, of Syracuse, N. Y.; Mr. Gmuender, of Columbus, Ohio; O. H. Hubbert, of Philadelphia, Pa.; and R. L. Yeager, of Kansas City, Mo.

Dr. L. A. Saxer, of Syracuse, N. Y., then offered the following resolution:

Resolved—That the chairman appoint a committee of five to consider the advisability of forming separate state associations to act with, and to be a part of this association, and report at the session to be held Friday afternoon.

Commissioner J. B. Jones, of Utica, N. Y., submitted the following resolution:

Resolved—That a committee of five be appointed to consider the advisability of holding the annual meeting of this Department of School Administration at a time separate from other educational associations, to report at Friday's session.

On motion the resolution was laid upon the table.

The chair then appointed Wm. Geo. Bruce, of Wisconsin; Mrs. Mumford, of Philadelphia; Mr. Quimby, of Mont Clare, Pa.; Dr. Saxer, of Syracuse, and Dr. Clark, of Detroit, in accordance with the first resolution.

The meeting then adjourned.

SECOND SESSION.—FRIDAY, JULY 10TH.

The chair called for the report of Committee on Nominations. Chairman Kiely submitted the following list of nominations:

President—Dr. H. L. Getz, Marshalltown, Iowa.

First Vice President—Dr. L. A. Saxer, Syracuse, N. Y.

Second Vice President—W. H. Bennett, Esq., Milwaukee, Wis.

Third Vice President—R. L. Yeager, Esq., Kansas City, Mo.

Secretary—Wm. Geo. Bruce, Milwaukee, Wis.

Executive Committee—Wm. S. Mack, Aurora, Ill.; L. D. Wilkes, St. Paul, Minn.; P. R. Kiely, Syracuse, N. Y.; Adrian Houtkamp, Milwaukee, Wis.; Hon. Jas. J. Little, New York City; Dr. J. L. Gaston, Montgomery, Ala.; Martin A. Gmuender, Columbus, Ohio.

The report was unanimously adopted and the officers declared elected.

Chairman Clark then appointed Mr. Kiely and Mr. Yeager to escort the newly elected President to the platform.

President Getz then made a pleasing address, thanking the convention for the honor conferred upon him and assuring the department of his best efforts in the direction of continued and growing interest in school board work.

He then called for a report from the committee appointed to suggest ways and means for state organizations.

The committee made the following report:

Your committee, which has been instructed to report on the advisability of promoting state organizations of school boards through the aid of this national body, begs leave to report that a careful examination of the subject has been made.

We are of the opinion that the administrative factors of school systems in this country have not been as effective in many directions toward accomplishing the highest results as they should be, or can be. We find that in the consideration of legislation in the various states, in behalf of the educational interests, the administrative factors of school systems have been ignored, and that the professional factors have, in many instances, failed to recognize the practical phases which should, and must be determined by school boards.

We recognize the absolute necessity of stimulating organized effort on the part of school boards, and we therefore submit the following resolution:

Resolved—That the National Department of School Administration earnestly recommends to the various boards of education throughout the United States a strong effort toward the unification of interests and methods, and toward active co-operation; and be it further

Resolved—That we urge the necessity of state organizations of boards of education for the promotion of all matters pertaining to practical and wise school administration.

On motion of Mr. Bair, of Pennsylvania, seconded by Mr. Houtkamp, of Wisconsin, the report was unanimously adopted.

Dr. J. M. Clark, of Detroit, then read his paper on "The Pensioning of Teachers."

The department adjourned *sine die*.

WILLIAM GEORGE BRUCE,
Secretary.

PAPERS AND DISCUSSIONS.

THE SCHOOL BOARD CONVENTION IDEA.

BY WILLIAM GEORGE BRUCE.

The movement to bring together members of boards of education in a manner as effected by the teachers' organizations may be called a new one. Until two years ago no serious effort in that direction, promising life and permanency to such an organization, had been made. Neither had the regular educational bodies attempted a department devoted to school officers or to school administration.

The effort to elevate the standard of school boards, to increase their efficiency and dignify their labors, is not only commendable, but entitled to universal support. And your presence here today is the signal that the effort has not been in vain. It is then with pleasure that I here assist in rocking the cradle of the infant whose rapid growth and strength, I trust, will develop into something useful and permanent.

The movement which has made this meeting possible has only a brief history. The feeling that such a movement should be inaugurated has undoubtedly existed for many years. It was not, however, until two years ago, that steps were taken towards effecting state organizations of school boards. The state of Illinois succeeded in being first. The states of Wisconsin, Iowa, Texas, Minnesota, and Pennsylvania followed.

Last year the National Educational Association, recognizing the feasibility and importance of the movement, created the Department of School Administration. We have assembled with us here today delegates from all parts of the United States, and the beginning is a most gratifying one.

The movement which finds its expression here for the first time in a national meeting is not without serious import. If the question were asked why an effort was not made sooner, it would almost seem as if it had been held that the school board was not necessarily a part of an educational system, or that its duties and labors were not sufficiently important to warrant more progressive activity. In consequence, the value of school board labors has been belittled, and the relation between the business and professional factors of a school system misconstrued and misinterpreted.

The professional end of the ordinary school system has, however, continued to advance and has outstripped the administrative end in many particulars. So that it may be said in many localities that while the average schoolmaster is well equipped for his duties the school officer is not.

Here it may be argued that the teacher follows his profession as a life's work while the school officer has only a comparatively brief tenure of office, and consequently less should be expected of the latter. And in line with this it is also commonly held that while the one requires professional training the other requires only an ordinary knowledge of the common-place affairs of life. Are not the responsibilities of the one as grave as those of the other? Should not each in his respective line be equally well equipped to meet the duties sufficiently? Does it not require a competent school board to select a competent superintendent? Is not the latter largely a contingent upon the former?

If true educational progress must come from the professional men of a school system, then the school board which must make such progress must itself be progressive.

It is a deplorable fact that there are thousands of members of boards of education who have but a crude conception of the important trust imposed upon them. School boards are short lived as a rule. Members are dropped and added with great frequency, and without allowing them to become fully familiar with the school system for which they are called upon to legislate for and administer. The more serious problems which involve true progress are allowed to drift, either to solve themselves in the course of time or to remain unsolved.

The members are principally business and professional men who are so deeply engrossed in their respective vocations in life that the time which they give to school affairs is but limited, and almost wholly devoted to the more pressing routine matters. Consequently, but little time is given to questions of wider scope and importance.

It may be said here, however, that the loose system in vogue throughout the country in forming school boards is largely responsible for this condition of things, and is, therefore, not immediately chargeable to the men who are chosen, or to their motives. The opportunity afforded through political influence to satisfy personal ambitions and selfish motives, must, when applied to school boards, exercise a discouraging drawback upon school systems.

However, the purpose in coming together today, is not so much for a discussion of the manner in which boards of education should be created, as it is of a widening of the field of usefulness after they have been created.

A unification of boards of education can accomplish two specific objects. First, promote their efficiency in conducting the more strictly practical and business branches of their work. Second, in bringing the boards into closer relation with the theoretical work of a school system, and, consequently, nearer the teaching force and the more vital and far reaching interests.

The members of boards of education everywhere have hitherto remained in isolated groups, and have sunk into unconscious egotism, believing that the building of school houses, employment of teachers, adoption of books, and purchase of supplies, are simply transactions requiring no further thought or discussion beyond pacifying a local community. The average school board member believes that his school system is "all right" when matters between the board, teachers, and the public, are harmonious. Standards of excellency evolved by comparisons are almost unknown to him. Progress, has, as a rule, been made by the professional portion of a school system at the risk of opposition and defeat. Many school boards have, it may be said, obstructed rather than promoted the professional or theoretical work.

But has even the practical or business portion had full attention? Would not the many and perplexing school board questions find a readier and wiser solution in a free discussion between board members from various sections, of varied experiences. The questions of heating, lighting, and ventilation of school buildings have only too often been discussed with greater eloquence by architects and building contractors than by school boards. This eloquence has too frequently resulted in the adoption of a heating system which has eaten voraciously into the school treasury, in a lighting system which has increased the oculist's practice, and in a system of ventilation which has produced pale-faced children and consumptive teachers.

But there are school boards and school board members who have devoted time and thought in the direction of true progress, whose earnest labors have meant better school houses, better teachers, better books, and, consequently, better pupils. It is those who by their exceptional work have attained the highest and best results whose voices we hope to hear at this meeting.

If the practical and theoretical, the business and the professional parts of a school system could be conducted as separate and distinct departments, dissolving the close relation which the one bears to the other, I would venture to say that this meeting today would have less significance. And yet, if, on the one hand, the legislative, the administrative, together with the executive functions of a school board were confined to the erection of school buildings and the purchase of school furniture, and, on the other hand, the course of study, adoption

of text-books, etc., left entirely to superintendents, principals and teachers—there would still be a justification for this movement.

But the two are not only closely interwoven but inseparable. One must rest upon the other. A successful teaching force can only be created by a wise school board.

The school board then is more than a mere salary dispensing office or schoolhouse construction bureau. It is more than a mere custodian of school records and school funds. Its deliberations affect teachers, their efficiency, their promotion, existence; affect pupils, their studies, their success, health, happiness—their equipment for future useful citizenship. Strictly school board problems should be solved by school boards, and not by superintendents.

The superintendent of schools must, it is true, be the strong pilot whose hand guides the educational ship, and diverts its course from the perilous rocks. But, in order that he may be recognized as the educational expert, whose counsel and judgment is entitled to the highest consideration, the board must first be capable of such appreciation. The same weakness which has characterized school boards in either direction has led to a lack of appreciation of the educational expert, and the true relation he should bear to the school system and the confidence which should be reposed in him.

A better understanding of the real function of a school board means also a firmer appreciation of the professional expert and his assistants; it means the concerted action of board and teachers towards higher and nobler results.

"SCHOOL BOARDS, WHAT AND WHY?"

BY PRESIDENT R. L. YEAGER, KANSAS CITY, MO.

It is with some hesitancy that I approach the discussion of my topic, before this audience, thoroughly versed, no doubt, in all the essential requirements of school boards. Be this as it may, I invite fair criticism and discussion, as we are here to learn from one another the best methods, and if we but discuss our several subjects honestly and fearlessly, we will be benefited by our coming together.

We are all striving, I doubt not, to reach, as near as may be, the ideal school board. I accept it as an admitted fact that for the proper management of schools, there must, of necessity, be a head to control and direct. Power and authority must be lodged somewhere. There must be a fountain source where all power is vested, and with school management, as a rule, this power and authority is vested in the

school directors, trustees, or officers which, by common consent, are called school boards. Trusting that I may contribute some word or thought that will be helpful in the attaining of this ideal, is the reason that I am here to discuss "School Boards, What and Why."

SCHOOL BOARDS—COMPOSITION THEREOF.

I have strong convictions as to the composition of school boards, as regards the personnel of the board and the duties and responsibilities resting upon them. It may be, feeling as I do on this matter, that I may express my convictions in too positive language. If so, I beg your indulgence, as I have no thought or intention of doing an injustice to any one. I simply wish to do what I may in placing school boards in the proper light and thus contribute somewhat to awakening the people to the duty resting upon them as good citizens, and to the imperative necessity of improving the character and standing of school boards.

In other words I would, by improving the personnel of school boards, make it worthy the ambition of any man to accept a place on the board. I would raise the school boards to a higher plane, so that when you say a man is a member of the school board you have given him the highest compliment possible for a man to receive. Why should not this be the case? And as a first step towards this, I am a firm believer in small school boards for the best work, say six members for every two hundred thousand inhabitants, or less, with one member for every additional fifty thousand. I also think it best that the members should be elected from the city at large, as by this method you will, as a rule, select better men. A man who aspires to a seat on the school board by ward political methods, may be a very strong man in his ward, but when the people at large are given a chance to pass upon his qualifications, he will, in the language of the Hon. Mr. —, the day after the election, wonder "where he is at."

Yes, if we would improve our board, let us get away from ward methods as far as possible in the selection of members. Why should we select by wards? Why not let every member feel that he represents the entire school district? I think members should be nominated and elected by the people, and such nomination should be as far removed from political and sectarian influence as possible. We need live, active, honest, and up-to-date business men—men who are abreast of the times. No old fossils, if you please, or a man with a grievance, or a man with a friend to reward, or an enemy to punish. No! No! we need and must have broad-gauged, liberal-minded, cultured and good business men on our boards, if we advance our schools as they should be.

I cannot state this too strongly. Look well at the personal and moral character of the members of your school board. Also separate the work and finances of your school board absolutely from the city government, make it independent and free from city control and domination. The interest at stake is too great and sacred to have it subject to the whims and foibles of your city councils. You are dealing with the grandest problem of life, the educating and ennobling the youth of our land. The school board, if properly constituted, will be far superior to your council. And to require a board thus constituted, to be a suppliant to the average city council, for the necessary appropriation to carry on the schools is a grievous wrong. You can rest assured that if for any reason the revenues of the city are curtailed and some department must suffer, it will be, as a rule, the school, as the ward statesmen of the council must keep their fences in repair in their own little kingdoms. I would have the school boards make the tax levy for carrying on the schools, and certify the same to the taxing authorities for collection and return direct to the boards, as the boards are unquestionably the better judges as to the requirements of the schools than the city government, whose members are in no sense familiar with the work. I would place the entire responsibility upon the board, knowing full well that if the schools are not conducted upon an economical basis, the people, the source of all power, will dismiss them as unfaithful stewards, and select others more worthy. Yes, divorce school boards absolutely from the contaminating influences of politics and sectarianism. Non-partisan and non-sectarian school boards are the need of the hour, if we would approach the ideal in school government. We will not then be humiliated by having it published broadcast over the land that seven members of the school board were fined and sentenced to jail by the supreme court of a state, for contempt in refusing to obey the mandate of said court, forbidding said members from conspiring together to stifle and thwart the will of the people, in order to carry out their own selfish and partisan purposes. Non-partisan and non-sectarian boards will never act thus. I speak from experience along this line, as I am a member of a board that has been thus constituted for more than twenty-five years. I am well aware that it requires constant care and attention to maintain a board upon this basis, but the result will more than repay the labor. You will have to combat the efforts of scheming politicians, who are ever on the alert to obtain control of the school management, as they well know that it can be made a Corliss engine of power, if so directed, to advance a man's political ambition. To meet this we should select business men, as above named, who have no political aspirations, for members—men whose sole ambition is to improve the schools. If

you do, you can safely rely upon the people to sustain you. I have witnessed the struggle of the partisan against the non-partisan, when last April the partisan was nominated by the two dominant parties, and the non-partisan ran independent, and when the people spoke, 10,816 said non-partisan, and 7,924 said partisan board. It was a battle royal but the people triumphed.

In some boards that I know of we find saloon-keepers, and two-by-two ward politicians or ward strikers, active and prominent members of the board, whose sole thought and ambition is to get ahead of the other "feller" or to foist upon the schools some A B C teacher who can be used to advance their own selfish interests. The very thought of such men being placed in this position of honor and trust, to guide and control the moral and intellectual welfare of our schools is revolting in the extreme to me. What an example to place before our boys and girls.

So much for the composition of school boards.

SELECTING SUPERINTENDENT AND EMPLOYEES.

After the board is organized the first action should be the selection of the superintendent and other business employees. You will soon realize that your greatest difficulty will be in the selection of your superintendent. In making the selection don't jump at conclusions—don't be in a hurry; weigh him carefully. After you find that he measures up to the required standard intellectually, then comes the greatest difficulty, as the "woods are full of men" of the required intellectuality, who make poor superintendents. You need much more than book learning. You need to have these further questions answered in the affirmative. Is he possessed of good, strong, old fashioned common sense? Has he good business qualifications? Is he a man of self-control and executive ability? Does he appreciate the value of a dollar? Will he, in his oversight and supervision, constantly bear in mind the cost side? Is he strictly temperate and moral? To state it differently, he should be, in addition to his intellectual ability, a man self-poised, strong in executive ability, sparing of speech, a good listener, patient, of positive convictions, economical and practical, and strong on the human nature side. Yea, a many-sided man. As to his assistant or assistants, be guided by his judgment, as he has to work with them and should have men in harmony with him. You should be more than careful in the selection of your secretary—honesty and business qualifications must be the guiding star. When you have found the right man, become civil service reformers at once, and keep him for life or during good behavior. In the selection of the above, who are the right and left arms of the board, fitness

alone should be considered—all else should be cast to the winds. When you have so chosen, you have lifted tons of burden and care off your shoulders and you are ready for business.

AS TO SCHOOL BOARD WORK.

The board should transact all its business as far as possible as a board. It is all right to appoint your committees, but as far as practicable I would have the entire board as a committee in all important matters. It has been my observation that most all the disturbance and mischief that boards have to meet comes through committee work. This is the open door through which walks the criticisms and insinuations, and intimations that some baneful influences have been invoked. Is it not wisdom, to say nothing of policy, to avoid all possible criticism?

The employment of teachers, purchasing furniture and school supplies and the awarding of contracts, in fact all the material work, I would have done by the board as a whole, and not in a perfunctory manner upon the recommendation of some committee. Is not the united wisdom and experience of the board more effectual than the judgment of a committee? Some will say, "O, we have n't the time." I think I speak from experience when I say, if the work of the board is systematically arranged and conducted, the committee work is light. I grant you that there is some work best done by a committee, as the work of your auditing and finance committee, and your building committee, to watch and see that the work is being done as per contract. But the point I wish to emphasize is this, do all you can as a board. Use your committees as little as possible and have as much of your business as practicable transacted in the board room, open to all, so that every person who wishes, may see and hear what you are doing. Take the people into your confidence and transact all your business, as a rule, publicly. Of course there are some matters that can only be transacted in executive session, the discussion of teachers for instance, but in all matters practicable make your actions open to the public. In the purchase of furniture, books and all other supplies, have the seller bring his samples to the board room, and if he has anything to say as to his goods, let him speak to the full board. I would not walk across the street to examine any man's goods. I am in favor of his doing the walking. Avoid junketing trips to inspect a man's goods, as you would the deadly shade of the Upas tree. Make them come to you.

I would have the board, as much as possible, partake of the partnership idea. Let these partners act as partners usually act in conducting their private business, viz., the interest of one is the interest

of all. In fact it is nothing but a large public partnership business that we are conducting. Let business methods prevail to the utmost extent, as if it was a private partnership. Let business be the motto, and if so, you will be surprised at the amount of business you can transact. With eighteen years experience as a member, fourteen of which as president of the board, I have as yet to make my first speech. We have not the time to make speeches or arise to make or second a motion; we have too much business to transact, and we should act in the same manner as we do in our counting houses, offices, and shops.

In the manner of transacting business, permit me to draw two pictures. Imagine a large airy room, plainly furnished, with a long table in the center, with chairs for six members and the secretary, with plain, ordinary chairs around the sides of the room. At the table you will see the six partners, viz., members, transacting and disposing of all business in the same manner and in the same tone of voice as partners in private business. No speeches, no loud talking, with an opportunity for every person to be heard that wishes to come before the board. Now as to the other picture: City about the same size, enter with me into the elegant upholstered room with frescoed sides and ceilings, furnished with elegant roller-top desks and leather-backed chairs arranged in a semi-circle for some eighteen or nineteen members, with a throne at one end, upon which the president is seated, with a large lobby seated in opera style, to accommodate some three or four hundred visitors. Everything is dignified and imposing. You almost feel that you are in the senate chamber. Directly you will see Mr. Smith arise with dignity and obtain the eye of the president. You hold your breath, expecting a sensation, but Mr. Smith, who is the member from the Ninty-ninth ward, is simply moving that the janitor of the school in his ward be given a new broom, and then up jumps Mr. Jones to second the motion, and when the motion is put and declared carried; you hear applause from the gallery, for the janitor is there with a lobby from his baliwick and they wish to show that they appreciate the effort. The janitor has the fifteen cent broom, but time enough has been wasted to buy several dozen brooms. Which board will transact the most business with the least expense? You may say it is overdrawn, but I assure you there is more truth than poetry in this statement. In the transaction of business it is very rare that a principle is involved, for, as a rule, it is usually a question of the best method. And it is with genuine pleasure that I can say that the records of our board will show that we have always been unanimous in the transaction of business. We differ, of course, in what is for the best in the discussion of the question. If it is developed that a majority is in favor of a certain course, the formal vote

will be unanimous, unless this discussion discloses that the minority are bitterly opposed to the proposition from principle and not a mere whim, when, in that event, the matter is just as unanimously dropped. Members of boards should be more than careful as to employing relatives. It may seem harsh, but I believe it is best not to employ relatives. When a teacher or other employee is a relative of a member of the board, the human nature of the principal and superintendent will be liable to warp their judgment or criticisms as to the merit of the teacher or employee. With some four hundred teachers and with some sixty other employees in our schools, not one is a relative of a member of our board.

It is by paying attention to matters of this kind that boards can gain and retain their influence with the people of the district. The board should be leaders in all matters pertaining to the schools. They should so act and conduct themselves as to merit the confidence of the people, selfish interest should be relegated to the rear and all should work together for the betterment of the schools. If the boards will so act, they will soon realize that any proposition they submit to the people will be carried by practically a unanimous vote. What a trust is in our keeping! No wonder that the honest, earnest and true school board trembles when it realizes the responsibility resting upon it. The welfare of our country is in our keeping to a large extent. It is our duty to see to it that the highest citizenship and love of our country is instilled in the youth of our land, for I believe with all my heart that of all the means of defense, the public schools stand in the very front rank. Yes, the common schools are destined to be, if they are not already, "the sheet anchor of safety for our country." We reach the masses and not the select few; we reach the rich and the poor; the high and the low, and bring them together under one common influence and there teach them to know and respect each other with regard to their individual merits, and not the accident of birth and position. We teach the highest morality and the best citizenship, with the result that the overwhelming majority of those who go out from under our control will become good citizens, and will ever be found true to the institutions of our country, and will ever oppose foes from within as well as from without.

If this is true, should not the people exercise the greatest care in the selection of members of a school board? Let these annual meetings continue and the time is not far distant until the people are aroused to their duty. I am rejoiced to see already movements on foot throughout the country to improve the character of school boards. Let the good work go on. I thank you.

THE RELATION OF A BOARD TO ITS SUPERINTENDENT.

BY WILLIAM S. MACK OF AURORA, ILL.

We have assumed in the discussion of this subject that the size of the political unit whose school affairs are administered by a single board of education employing a superintendent is immaterial. We have assumed also that the question includes all boards having authority under the school law to elect a superintendent, sometimes called a principal in small places, who is, theoretically at least, in all matters pertaining to the professional conduct of the schools the executive and advisory officer of the board. We are satisfied from investigation that the defined or implied duties of such superintendents are, as regards essential matters, the same in all the cities and school districts of the several states, and that there is not enough difference in local conditions to vary to any extent the relations which should exist between a board and its superintendent in any well-ordered school system.

The relation of a board of education to its superintendent should not differ in theory and in fact from the relation which the board of directors of an incorporated manufacturing or other commercial enterprise sustains to its superintendent. The fact that one has to do with public and the other with private affairs is of no consequence as affecting the relations between the board of administration and its executive officer.

The directors of a private corporation are chosen by the stockholders to see that their interests are subserved in the conduct of the enterprise which their combined capital has created, and which means among other things the raising of money to be invested in buildings, materials and machinery, in labor requiring skill and technical knowledge, and in expert direction or supervision that all these factors may be so related as to ensure the efficient and economic operation of the plant.

Boards of education are chosen directly or indirectly by the people of a community to see that their interests are subserved in the conduct of the schools which their combined capital in the form of taxes has created for the education of all the children of the community, which means the raising periodically of fixed sums of money to be invested in buildings and appliances, in teachers, and in supervision by one expert in his knowledge of child nature and in ability to bring

the children into proper relation to the forces which play continually within the school environment.

The directors of a private corporation are, as a rule, men who know actually very little about the technical details of the business which they have been elected to administer and it is only rarely, that one can be found possessing the experience and skill necessary to do what the ordinary mechanic is paid day wages for doing. It may be further assumed that very few of such directors know enough about the various shop processes and the quality of materials to tell, except in the most general way, whether the different agencies incident to the operation of the plant and the turning out of products are being directed to the greatest advantage.

Precisely the same thing may be said of the average board of education as regards actual knowledge of the details of school work—of subject matter and the sequence and adaptation of the same, of the relation and sequence of subjects, of methods of presentation, of proper methods of government and discipline when the interests of many are to be considered, and of many other details which must be taken into account in educating children under existing public school conditions. The members of school boards have perhaps a general conception of what should be accepted for a minimum of result, but as to the best process to follow to get desired results they have necessarily only the most vague and ill-defined notions.

In both cases the directors with now and then an exception, have not had the training or the experience which makes them experts in selecting materials, adapting methods and keeping in operation without waste or misdirection the various contributory agencies. They are not elected for this purpose in either case on account of professional or technical qualifications which they are known, or even supposed to possess. Their duties are general and relate to such matters—financial especially—as concern the smooth, efficient and economical operation of the producing factors.

In order however, that those things may be skillfully and intelligently done, which these boards have neither the time nor the ability to do themselves, and which neither the stockholders in the one case nor the people in the other, expect them to do, they employ an expert known as a superintendent. Such a superintendent, if employed to direct the operations of a manufacturing plant is chosen only after the directors have determined his specific qualifications for managing the details incident to the particular line of production in which they are interested. They take into account his experience, his technical knowledge and his personality, and having once settled these matters to their satisfaction place him in charge of the plant as

their responsible executive agent, with implied or officially delegated power to manipulate the essential producing factors—labor, materials and processes, or men, materials, machines and machinery—in his own way, limited only by such restrictions as the board of directors, acting as the responsible financial managers may elect to impose. In all successfully managed manufacturing enterprises, large and small, it has come to be considered a recognized principle that a competent superintendent must be given freedom, without the risk of interference on the part of the directors, in all matters relating to his particular kind of supervision; that otherwise it would not be fair to hold him responsible for results, to secure which in the surest and most economical way is the very purpose of his appointment.

Examples have not been wanting in the history of nearly every manufacturing community, of mismanagement and failure due to a violation of this principle. The number of industries that have been wrecked through the perverseness, the ignorance and the conceit of directors in this particular would doubtless furnish a most interesting item of industrial statistics, and would show that failures and assignments have been due quite as often to this as to any other cause. Unification of forces is essential to the highest success of any undertaking whether it be educational, philanthropic or industrial. It is equally true that this unification resolved into its ultimate, determinate details, is dependent upon the organizing ability of single minds. This we shall have to admit on reflection, even though it may not seem apparent at the moment. The views of the governing body and of individuals may, and should, influence the paid expert in whatever field he may be employed. But these would avail little, however valuable, did he not by virtue of his experience and technical training know how to adapt them, if at all adaptable, to the practical affairs of the business with which he is supposed to be conversant. In the formulation of plans and policies affecting the combined interests and the combined capital of individuals the best thought of many minds is desirable, but in the execution of plans and policies once formulated, the desirability and necessity of substituting the one specially trained mind for the many becomes apparent, and is recognized in the conduct of every private enterprise, whether factory, store, railroad, bank or what not. Failure to rightly estimate the potency of the single mind in the executive affairs of a corporation means waste of time, labor and materials; means, consequently, small profits or no profits, instead of large ones, and, as before stated, possible bankruptcy. It leaves out of consideration the element of responsibility so essential to the proper conservation of the various forces which have to be kept

in continual operation, each supplementing the others and the others each, in the profitable management of any business.

We have dwelt somewhat fully upon this phase of the question because there seems to be a notion too prevalent among members of school boards that the principle just emphasized does not operate in the management of school affairs. It will not be claimed that this notion has been reached through a process of reasoning from observed data and experience, which has made inevitable the conclusions that the recognized methods applicable to private business are not adapted to the administration of a school system. It is due rather to conceit, to ignorance, to thoughtlessness and to various local influences, not necessarily political, which in no way affect the directors of a corporation. A man who is the owner or one of the directors of a factory employing many hands and concerned with many complicated processes, and who concedes without hesitation the value of an expert superintendent who shall direct all shop details, unhampered by the owner or the directors, will, as a member of a school board, reverse all the precedents of a private business and do precisely the thing that he would oppose as ruinous in factory management. Such cases are not rare, but common under our system of local self-government and local elections. Under any circumstances such inconsistency is inexcusable and cannot be too strongly deprecated, especially when we consider the human interests involved. In the one instance it is perhaps wood and iron that are to be handled and fashioned; in the other the impressionable natures of children. If a responsible expert is necessary in the one case should he not be deemed doubly necessary in the other? If one is given a reasonable latitude in the control of agencies and processes required for the shaping and combining of wood and iron, should not the other be given equal latitude in directing the more difficult agencies, and the more delicate and complicated processes involved in the proper education of children?

It may be urged, we know, and it is often urged, that a school board's responsibility to the people makes it unwise to delegate too much power to a superintendent. The objection would doubtless be well taken if it pertained to the business affairs of a school system—but when applied to purely professional matters it would be scarcely worth considering were not too many boards, sincerely or selfishly, influenced by it, arrogating to themselves a knowledge and a power of discrimination which even an expert with years of training and experience would dare to exercise only after due caution and reflection. An individual is deemed wise who knows his own limitations, and a school board is wise that does not assume a direct responsibility which as individuals and as an organized body it is in no way fitted to dis-

charge. A school board's responsibility to the people and its obligations to the children of the people require that it take the judgment of its paid professional executive and advisor on all questions relating to the strictly educational affairs of the school. Otherwise the term superintendent as applied to him becomes a misnomer. His function is reduced to that of a clerk or messenger. His influence as an inspirer and a director of the various school agencies is minimized to mere nothingness. Still more to be deplored, what has promised to become an honorable and a necessary profession in the economy of popular education is deprived of its dignity and its influence.

An examination and comparison of local school systems will confirm the reasonableness of our contention that the established laws of business cannot be violated or suspended with impunity in the management of the professional details of our schools. This was the observation of Dr. Rice in the larger cities as shown by the *Forum* articles a few years ago, and it is just as true of the smaller places. Wherever the esprit de corps of the teaching force is marked, wherever the professional spirit leavens all the work, wherever the best methods of teaching and of government find their application and fullest expression, wherever there is a purposeful, a sympathetic and a loyal co-operation of all the educational forces, there you are quite likely to find a trained superintendent with convictions and with courage, who possesses the confidence of his board, and who is accorded the right of final judgment, with the attendant responsibility, in all matters coming within his special province. Wherever a different notion of the board's responsibility to the people and its relation to the superintendent prevails, wherever a different policy governs, there are almost invariably to be found, in a more or less aggravated form, the various evils of which the critics of our public school system justly complain—favoritism and politics determining the appointment of teachers, the retention of poor and mediocre teachers who possess neither sympathy nor professional spirit, lack of adequate appliances, lack of organic unity in plan and purpose, and much more that is inevitable in the absence of a correlating and vivifying principle.

But you may say our argument presupposes qualifications which the average superintendent does not at present possess. Granting this to be true, which we do not believe is the case, have we any precedent for looking to the average board of education to supply the deficiency. Who would seriously maintain for a moment that a board is as good a judge of teachers, of text books, of a course of study, as one who has had special experience and special training in such matters? If competent school superintendents are a scarcity what better service can boards render the cause of education than to create a

demand for them, and what better way to create this demand than to confer such powers upon these officers as will test to full measure their manhood, their scholarship, their judgment, and their organizing ability? No man competent to supervise a system of schools will seek to evade the responsibility thus imposed. If allowed to exercise his discretion in the management of the educational forces with which he has to deal, and if held strictly accountable by the board and the people for results, he will quickly see that the surest path to success and permanency of position lies in making the schools of the greatest possible service to the pupils. For a board to so shape conditions as to make it easier for a superintendent to act with this singleness of purpose unhampered by local influences would indeed be an incalculable boon to the schools, and would go far toward lifting them to that plane contemplated by the school laws of the several states enacted for their establishment, below which they must ever remain if the highest good of the pupils is to be subordinated to the caprice, the ignorance, the selfishness and the political ambition of the school director.

Among many things pertaining to school management which require the services of an expert for proper adjustment are the selection, transfer and dismissal of teachers, and the selection of text-books. A board's attitude in the settlement of these questions indicates whether or not it values the expert judgment of its superintendent, and is willing to let its final action on these most vital matters be governed by it. Here is the true test of a board's disposition to apply private business methods to public school affairs, and here we are given a clear insight into the relations of a board to its superintendent.

If the principles which regulate the conduct of a private business enterprise are considered essential to the efficient conduct of a school system then the superintendent's recommendations as to teachers and text-books should be taken as the final sense of the board and ratified by official action. There is no danger in this, except to the superintendent should he choose to act from any lower motive than the promotion of the highest interests of the schools; neither does the board nor its committees forego the right of preliminary discussion, differing maybe as to the wisdom of the action recommended, and endeavoring to convince the superintendent that the action he urges is not desirable. But when it comes to the point of action, if the superintendent has not been convinced, whose judgment shall be taken? We believe that of the superintendent—the expert—should prevail. Quite pertinent to this particular phase of the discussion is a paragraph in an article by Superintendent L. H. Jones, of Cleveland,

entitled "The Politician and the Public School," published in the June number of the *Atlantic Monthly*. He says:

"I have no doubt that there are unjust and incompetent superintendents, supervisors and principals; but the number of those who will prostitute their office to the service of their prejudices is relatively so small as not to be taken into account, while their ability to judge of the professional merit in teaching is so far beyond that of the average committeeman or member of a school board as not to allow of comparison. Were professionally competent persons made the sole judges of competency, whether the customs be supported by statute or by the higher laws of common consent of school board and community, teachers would be quick to see its benefits."

Essentially the same thing might have been said about text-books in comparing the qualifications of superintendent and board, had a consideration of this question come within the scope of the article from which we have quoted. There is no more unnecessarily vexing question to be considered by a board of education than this—unnecessarily vexing because if relegated to the professional province of the superintendent and his assistants where it properly belongs, the board would be required to pass only upon the advisability of a change or an adoption in view of the possible expense incident thereto, which in fairness, we must admit, is all that it is qualified to do. The merit of a particular text-book and its superiority over any other presented for consideration, the educational advantage to be derived from its adoption, and its adaptability for a definite purpose, are questions which only an expert can determine, and if left to him, and it is so understood, the board and its committee will escape untold annoyance; publishers and agents will find their business greatly simplified, and we believe elevated, by having to deal with professional people; and what is of greatest importance, the schools will be better served.

It is unnecessary to follow the argument further or to enumerate more fully the powers which a board may legally transfer to its superintendent in order to make its relation to him reasonable and business like. Our plea is after all a plea for the child. The public school as an institution of the state exists for him and for him only. The child had no voice in its creation, nor has he any voice in its conduct. It is his institution nevertheless. It is held in trust by the state—by its authorized agents for him. This implies that the child in the state has certain rights and that because he is a child he must be guaranteed these rights through the qualified agents of the state as provided by law. These agents are local boards of education. We believe the child is more likely to be assured of his rights as a pupil

in the public schools if the management of professional details is left to professional people. Until this is recognized as a principle we do not feel that a board can rightly be said to sustain the proper relation to its superintendent.

DISCUSSION.

MR. GORTON, of Yonkers, N. Y.—Mr. Mack's address ought to be read by every school board in the land. It is a most exhaustive treatment of one of the most important subjects in school affairs.

A. J. LINDEMANN, of Wisconsin, desired a discussion on elective and appointive school boards. He held that many cities wished more light on the subject as it was still a question which invited a great diversity of opinion. He believed in appointive boards.

MR. HUBBERT, of Philadelphia, spoke on the difficulties experienced in cities toward getting better school boards. Inferior school boards have created more injuries in educational work than educators themselves could mend. A review of Philadelphia's school system, which has thirty-seven different sectional school boards, and in all about 450 members, and a central Board of Education appointed by the judges of the several courts. He spoke warmly in favor of state organizations of school boards and for the purpose of increasing the efficiency of its members and towards elevating public opinion in favor of reforms.

MR. GJERTSEN, of Minneapolis, held that non-partisan elective boards were by far the most preferable. The method of appointing school boards was un-American. The voice of the people should and must be heard on school matters. He believed in the free-text-book system, in a restricted sense. In many cities it had proven a great burden of expense.

MR. G MUENDER, of Columbus, Ohio, believed the ideal board is an impossibility. In the organization of school boards he would favor long terms and representation at large, rather than by wards or districts.

JUDGE LEWIS, of Philadelphia.—There is no greater problem today, according to my mind, than the question of non-partisan school boards. As much as a non-partisan seems desirable, it is almost impossible to obtain it. He then dwelt upon the abuses in Philadelphia, and the struggle for reform.

H. H. A. RICHMOND, President of the Buffalo School Association deprecated the idea of appointing school boards by judges. He did not believe in drawing the judiciary into the political mire.

MR. QUIMBY, of Mont Clare, Pa., desired to announce that the Pennsylvania School Directors' Association sends greeting to the National Convention, and that he, as the president of that organization, took pleasure in extending this greeting. He advocated organization on the part of school boards, and cited instances in certain counties of Pennsylvania where the effect had clearly been demonstrated. The work begun in several states should be emulated by all states.

MRS. MUMFORD, of the Philadelphia Board of Education advocated women on school boards and did not think they would drift into bad political methods; that the real school board problems were confined to the cities, where politics

were a predominating factor. In Philadelphia, the appointment of school board members by the judges had improved matters considerably. She favored the separation of the business from the professional, in school administration, proposing two bureaus. One a bureau of superintendence, and a bureau of properties.

SUPERINTENDENT EMERSON, of Buffalo.—It is a strange coincidence that the first national meeting of school boards should be held in a city having no school board. He then dwelt upon the history of Buffalo's school system, and its present efforts to secure a school board.

DR. GETZ, of Iowa, in an able manner then defended the election of school boards by the people.

MR. DEMENT, of Elmira, N. Y., defended the dual plan. He believed in a plan by which school board members be elected at large, and at least four appointed by the mayor. "Talk about politicians on the school board. I would not give a cent for a member who is not a politician. They should be politicians—but keep politics out of the school board and the school system."

SHALL TEACHERS BE PENSIONED?

JOHN E. CLARK, EX-PRESIDENT BOARD OF EDUCATION DETROIT, MICH.

At the annual meeting of the National Educational Association in Philadelphia in February, 1891, the following resolution was adopted by the Department of Superintendence:

"Justice as well as the best public service requires the retirement and pensioning of teachers after a service of thirty years, and upon carefully devised conditions. We recommend the enactment of laws in the several states to permit and to regulate the retirement and pensioning of professional teachers."

This is the first record I can obtain of any concerted action being taken in this country looking toward this much to be desired project, although many philanthropists have given the matter much attention and it has been discussed sporadically for many years.

Superintendent Welcker, of California, in speaking of the necessity of keeping experienced teachers in the service says:

"How shall we invite and retain the best of both sexes? How shall we secure the inestimable benefits of experience? By saying to the teachers, 'Here is a great and noble calling, which it has always been, but which will henceforth provide against destitution and old age.'"

The teacher has at present no cheerful outlook for the future. He fears the approach of old age hand in hand with poverty, and betimes he leaves and looks out for something else. Suppose that some reasonable pension after thirty years of faithful service were granted to the teachers, say \$25 per month during the residue of his or her life. It might be that the liberality of the people as expressed by the legislature would prescribe a larger sum. But let us think of \$300 per an-

num. What a revolution that would create in the personnel of the profession. The intending man or woman would say to himself or herself: "Here is a noble calling in which for thirty years I can find a respectable living, and then when old age comes on and possible failing health, even at the most I shall not starve."

I am fully persuaded that an enormous amount of energy is wasted from the mere dread of poverty. Remove the anxiety concerning the future which clouds the lives of so many of our teachers, and I am positive that the results will be worth noting. Constant fear from the future is not a spur to progressive effort, but a barrier instead. Let us do our best to enable teachers to enter on their life-work without fear or misgiving. They will be able to give themselves up to it unreservedly, and to become year by year more valuable to the state.

I clip from the current news: "Washington, July 3d.—The total enrollment in educational institutions in the United States for the school year 1893-4 was nearly 16,000,000 according to the report for that year just promulgated by Commissioner of Education Harris. Of these all but 400,000 were in the regular schools, an increase of about half a million for the year. The percentage of total population enrolled for the schools was 20.53. School property gained in value during the year over \$26,000,000, and 1,103 school houses were in construction."

What is to be learned from these figures? Nearly 16,000,000 children growing to manhood and womanhood, their steps to true citizenship being guided aright by nearly half a million of teachers. Think you the obligation resting upon these teachers is less than that which would rest upon an army of half a million soldiers employed to defend their home and country? Are their wounds less severe though they be mental instead of physical? Is not greater self reliance, courage, fortitude and firmness required for the pedagogue soldier? Then why should one be neglected and the other applauded? Let an army of half a million men be called to defend our seaports for two or three months and physical suffering and injuries be received, how eagerly the public would respond with life annuities; and yet our teacher warriors guard interests fully as important, and sacrifice minds and bodies in noble efforts to accomplish a nobler end.

Do they not guard the portals leading to future citizenship?

Too often a teacher's work unfits her for another line of labor. When questioned whether they are weary or not of the routine of the schoolroom it is no unusual thing for them to reply, "What else am I fitted to do? Nothing, now, I fear." There can be no question in the minds of an intelligent person that twenty-five years service as a teacher, while it may not unfit one for continuing longer in the service does unfit the teacher for work in any other direction; and where a man or woman has devoted that period faithfully and conscientiously

to the service of the public, the latter may well recognize its indebtedness and assist them in their efforts, so that they may go about their tasks with a feeling of security as to the future, and do infinitely better in their trying work.

I am not positively satisfied in my own mind that it would be well to ask the state alone to pension teachers, as I believe a feeling of independence, which possesses the majority, would spur them to rather sacrifice something themselves, and have the consciousness of not being absolutely pensioners of a nation's bounty. I believe it better and more American to preserve, as far as possible, the feeling of independence that resents charity, and prompts one to be in a great measure self-sustaining.

Government paternalism has never met, and never will meet with the full assent of the educated. The initiative should come from the teachers themselves, and the state might well assist when the burden becomes onerous. Acting on this presumption I secured passage through our legislature of our Teachers' Retirement Fund Bill, in which is embodied the principle of an assessment on teachers' salaries as well as a provision for municipal help, and I am pleased to see that many cities and some states have adopted, or are about adopting, similar provisions.

This matter of teachers' pensions is not a matter of today; it has been for years in successful operation in many countries and has obtained success in direct ratio with the highest educational accomplishments.

GERMANY.

The success of the school systems of Germany is universally attributed by her own educators to her school laws; especially those which relate to the teachers. The provisions respecting teachers may be summed up as follows:

1. The recognition of the true dignity and importance of the office of teacher, in a system of public instruction.
2. The establishment of a sufficient number of teachers' seminaries or normal schools.
3. A system of examinations and inspections by which incompetent persons are prevented from obtaining situations as teachers.
4. A system of promotion by which faithful teachers can rise in a scale of lucrative and desirable situations.
5. Permanent employment through the year and for life with a social position and a compensation which compare favorably with the wages paid to educated labor in other departments of business.
6. Preparatory schools in which those who wish to eventually

become teachers may test their natural qualities and adaptations before applying for admission to a normal school.

7. Frequent conferences and associations for mutual improvement by an interchange of opinion, and sharing the benefits of each other's experience.

8. Exemption from military service in times of peace, and recognition in public and civil life as public functionaries.

9. A pecuniary allowance when sick, and a provision for years of infirmity and old age, and for their families in case of death.

10. Books and periodicals by which the obscure teacher is made partaker in all the improvements of all the distinguished members of the profession in his own and other countries.

The government has felt that to cast off and forsake all of the old and faithful teachers when they could work no longer would be to disgust the whole body, to break off the sympathies which unite them to their profession and to shut out of it many noble spirits. It has therefore most carefully guarded against these results by these regulations.

If a teacher who has been definitely appointed becomes unable to fulfill the duties of his station, either through the utter breaking down of his health, or old age, the authorities who appointed him—whether they were the county court, the town school commission or the parochial school committee—are obliged to pension him for the remainder of his life. This pension must, according to law, amount to one-third of his salary.

The government, although professedly military, has shown itself at least as interested in the welfare of its teachers as that of its soldiers; whilst we, who disown the appellation of a military government, take greater care of our soldiers.

Besides the provisions for pensioning the superannuated teachers, there is another law in force which relates to the future provisions of the widows and orphans of deceased schoolmasters, and which is deserving of equal praise. In each union a society is formed, the object of which is to provide for the support of the widows and orphans of deceased teachers. By these means the teacher is freed from anxiety about the fate of his family after his death, and is less tempted, than he would be if their after maintenance depended upon his own small savings, to divert his mind from his important duties by the desire of making a provision sufficient to support his family if he were to die before they were able to support themselves. If the widow marries again she loses her pension as it is supposed that her second husband is able to support her. Besides these advantages the regulations which have been described tend to raise the profession

in the estimation of the poor who see that the government considers not only the teachers themselves, but their wives and families are deserving of its especial attention. They also render the situation of the teachers more desirable for literary and clever young men, who find it an honorable station suited to their tastes and freed of many anxieties.

In France a teacher is pensioned after twenty-five years service. Deductions are made from the salaries. The teacher's pension, or a part of it, may be continued after the teacher's death to the widow and minor children.

Bavaria.—The pension amounts to 70 per cent of the salary after 10 years' service; 80 per cent after 25 years' service; 90 per cent after 40 years' service; 100 per cent after 50 years' service.

Hesse.—50 per cent after 10 years' service; 72.5 per cent after 25 years' service; 90 per cent after 40 years' service.

Saxony.—33½ per cent after 10 years' service; 41.5 per cent of the salary after 25 years' service; 70 per cent of the salary after 40 years' service.

In other German states and also in Holland, Belgium, Denmark, Austria and Russia, the pension is a feature of the educational system.

Belgium.—Mr. Wild encountered a teacher who was the fortunate recipient of a pension of \$1,000 per annum.

Switzerland.—Pension regulations, like all other educational interests, are settled by Cantons.

Sweden and Greece pension teachers.

Norway.—Teachers who have taught not less than 10 years will be granted retiring pensions. 30 per cent after 10 years' service; 40 per cent after 20 years; 50 per cent after 25 years; 60 per cent for 30, and upwards.

Australia.—Liberal pensions are granted. In 1885 twelve teachers in South Australia received retiring allowances averaging \$815 each.

Bavaria.—If a teacher wishes to marry he must apply to the provincial government for an official permit. For 50 years of service the medal of honor is conferred upon the teacher. Particular praiseworthy and serviceable activity is acknowledged by bestowing the silver or gold medal. The teacher on sick leave receives his full salary for at least half a year. All teachers are subject to assessments for pension service.

Japan.—Teachers receive life pensions after 25 years' service.

England.—The bill for pensions to teachers has made little progress during this year, although its ultimate passage seems certain. In February, 1893, the House of Commons after three hours' debate, during which no dissenting voice was raised, unanimously resolved that in the opinion of that house it is desirable that a national state aided system of superannuation for teachers in public elementary schools in Wales and England, should be established at an early date.

Mr. Ackland, as responsible minister of education, recommended that a scheme for pensioning should be proceeded with at once, and that teachers of broken health should be provided for, and that the provision for the old teachers should be at once increased.

I may further add that that provision known as the Limited Fund has been raised as stated by a minute report of the Revised Education Code for 1893 from £5,580 to £10,580 per annum.

Sweden.—A teacher receives, besides his salary, a dwelling house, a garden, fuel, and food for a cow.

Scotland.—The number of teachers connected with the pension fund in 1884 was 10,181.

Denmark.—After having taught a certain number of years a teacher is entitled to a pension. To receive a pension a teacher must be at least thirty years of age.

Wortenbergh.—School authorities are authorized to pension a teacher after nine years service if the applicant is either 70 years of age or disabled by disease.

If a teacher recovers from a disease that made him a pensioner, he must be reappointed to a teacher's place where his salary is not less than before. The number of pensions in 1876 was 2,110.

Servia.—In 1875 regulations were adopted granting to teachers who resigned after 10 years 40 per cent of the salary previously received, and 2 per cent more for every additional year's service for 25 years, after which the teacher of whatever grade is entitled to his full salary as a pension.

Finland.—The state pays teachers who have worked faithfully for 30 or 35 years their full salary as a yearly pension during life. In case of incurable sickness at a earlier time a pension of smaller amount is allowed.

Brazil.—After ten years' service as teacher, a pension is awarded which is sufficient for the teacher to insure his life. After 15 years' service the amount is augmented 25 per cent. After 25 years he becomes a teacher "emeritus."

Spain.—All teachers of public schools are entitled to a respectable dwelling house large enough to accommodate their families.

Why pension teachers more than other workers? I would not limit this old age benefit to any one profession, but it seems to me a desirable thing to have it gain favor among this intelligent body. It will receive a new dignity; its influence will extend, while hopeful courage will become more characteristic of American life than it is today.

What are the objections in the public mind? Chiefly a natural jealousy of superannuation as being a non-effective charge, and by the teachers, too often from the selfish objection that many will not remain in the profession long enough to reap the benefits of the pension funds.

It is no sentimental plea that I wish to urge on behalf of the Teachers' Retirement Fund, or I might speak for hours of the self-sacrificing devotion of many of our teachers, who in caring for others, have found it impossible to make provisions for old age. I believe that a much better class of workers will be secured. Too often the work of teaching is taken up with no intention whatever of remaining in it, for any length of time. Ambitious men and women are inclined to consider the teacher's position a mere stepping stone to some other occupation more desirable and lucrative. By adopting the plan of a retirement fund, we not only secure a better, more thoughtful class of beginners, but we retain those teachers when their experience has doubly qualified them for the work. It is not among apprentices, or first year workers in any line that we find the best results, but among

those who have made their calling a life study, and have added the knowledge gained from doing, to that which was gained by learning.

A singular fact connected with the opposition in regard to pensions is that it comes mostly from young people. Are they properly trained? One of the most beautiful traits in the character of woman is sympathy. Great thoughts and noble enterprises should always have a peculiar charm for teachers, and they should by example as well as by precept brighten the path along which they dwell. Shall teachers be the last to come forward to help one of their own craft when teaching is the noblest profession provided by God? Shall we look to the trades people for noble examples of humanity and love? Some of our young teachers are so calculating and severe they wish to crowd out older teachers without making any provision for them. Why are the teachers of this country behind the teachers of other countries in deeds of beneficence? Are not our training teachers neglecting to instill in the minds of the young women who are to instruct our children that they are to be instruments of good to others, and that it is not strictly honorable to take the places of faithful teachers without making some provision for them?

"Cast thy bread upon the waters, for thou shalt find it after many days." Not one of our teachers on our pension roll thought that she would teach twenty-five years. They all had some imperative claim of want, or duty, or kindness which interfered with their laying up for old age. Many of the older teachers have from a sense of honor sacrificed their own happiness and brilliant future, have remained single in order to take care of others. Teachers who have something to hope for and look forward to will do better work, they will be more interested in the little ones intrusted to their care. There will be more sunshine in our schoolrooms. Hope is the sunshine of life. They will learn the art of contentment. They will be willing to stay with us, and to make teaching their life work as they should, and not make it a stepping-stone to other professions; they will have more money to buy the necessities of life, for purchasing books for their improvement, for doing kind and generous things to their friends and neighbors, thus keeping them from becoming cold and hard in their natures.

A teacher's duty will not become a drudgery. There will be more love and good will among them, and there will not be so many of them to fight their fight alone and unobserved. Let us then press forward in this noble cause and have a system which will lift the teacher to a higher professional plane.

An effort to eliminate, obstruct, or prevent this movement, although originating from humane citizens is not in the cause of true human-

ity. It ignores the interests and sufferings of mankind and would perpetuate the carrying into effect what is clearly an erroneous view of what constitutes kindness and charity.

Are these imperative demands to be made subservient to the wishes of intolerant and supersensitive objectors, who are incapable of taking a broad or liberal view? Are we not prepared to have legislation enacted that will work to the relief of thousands of men and women who now suffer the wrongs of unrequited effort? Something has already been accomplished, and greater results are to be achieved in the future. This is an age of progress, and evidence of development is everywhere apparent. Let those who have the best interests of education at heart not be laggards in the race.

DISCUSSION.

MR. GJERTSEN, of Minneapolis, commented upon the excellent points in the paper. "In the pensioning of teachers one great problem is solved, as it gracefully retires old and superannuated teachers. I am opposed to state or government pensions, but believe in co-operative pensions. The conditions in Europe are different from those existing in this country. Teachers in Europe are poorly paid, while in this country they are comparatively well paid. Here, teachers are admitted to good society, wear good clothes, and take an occasional trip to Europe."

GEORGE W. DAVIS, of Chicago, did not object to the scheme for financial reasons, but condemned the idea upon principle. "I believe in being an independent American citizen, in being self-reliant, begging from no one, and compelling no one to give pension or to take pension. These pension schemes, which have been foisted upon the teachers, are an injustice. They are un-American."

DR. KRAKOWIZER, of Buffalo, protested against the position taken by the former speaker. "It is not a question of what the teacher gets, as it is a feeling of serenity for the future—a provision against want in old age. The teacher, too, is a soldier whose services are indispensable."

MR. MILLER, of Indiana, opposed the pension idea. He believed that all teachers are opposed to compulsory state laws for the purpose of pensioning teachers.

MARTIN A. G MUENDER, Columbus, Ohio.—"Back of the pension idea there is a generous impulse—but the sense of justice is left out. The teacher should be classed with all other professional men. The whole solution lies in the proper payment for teachers. Pay your teachers well and you or they will not care to discuss pensions."

SUPERINTENDENT EMERSON, of Buffalo, made a statement of the plan of the Buffalo Teachers' Retirement Fund. The law which created the fund had been originated by teachers, drawn up by teachers, and had had the support of the rank and file of teachers. Only the younger teachers who had expected to marry before old age arrived had opposed the measure. He believed pension laws a great blessing to the teachers.

STATE SUPERINTENDENT PATTENGILL, of Michigan.—“I believe that every person who has attended this meeting ought to enter a strong protest against the position taken by the gentleman of Chicago who is opposed to all pension ideas. A broad, liberal government honors its heroes, and rewards them; a narrow, puny man scorns their just demands. I condemn most emphatically all ungratefulness.”

R. L. YEAGER, of Kansas City, did not wish to place himself upon record on the pension problem. Yet he held that teachers were not overpaid. “The old and superannuated teacher presents a pathetic problem. Do you want to turn him out like an old horse? Does not public duty demand some provision for an old and faithful servant? Does not the school system on the other hand demand that teachers who have outlived their usefulness be removed? Should the board establish a marriage bureau?”

DR. ALLEN, of Jersey City, believed in giving teachers a full hearing at this meeting, and favored an increase of teachers' salaries.

H. H. HUBBERT, of Philadelphia, recited experiences in Philadelphia. He favored pensions for teachers.

A. J. LINDEMANN, of Milwaukee, said he sought light on the subject. He favored the pension idea more strongly since he had heard the objections which had been advanced. The objections were not sound. “A saving is desirable but losses on the other hand cannot be avoided. I believe school boards at the present time pay in the way of salaries all they possibly can. There are many reasons for inability to raise salaries. These reasons are not always apparent to the teacher. I do not believe that teachers are universally opposed to the pension idea.”

MR. QUIMBY, of Mont Clare, Pa., held that the pension plan was not practical in the rural districts as changes in teachers were made too frequently.

MR. SNYDER, of Jersey City, explained the New Jersey plan, which permitted changes of teachers and yet entitled them to pensions if they have served within the state.

DR. CLARK, of Detroit, whose paper had provoked the discussion, closed by stating that the principle of pensions had been misunderstood. He did not advocate a national pension system, but held that there were cases where pensions were desirable, and where they relieved embarrassments. “Retire your old and worn-out teachers by giving them a pension. It is not only humane but just.”

THE LIBRARY DEPARTMENT.

SECRETARY'S MINUTES.

BUFFALO, N. Y., THURSDAY, JULY 9, 1896.

The Board of Directors of the National Educational Association having granted permission for the formation of a Library Department, a meeting for effecting an organization was called for Thursday, 4 p. m., July 9, 1896, in the Library Building. The meeting was called to order by Wm. H. Smiley, Denver, Colo.

On motion of Wm. W. Bishop, of Lake Forest University, seconded by Mr. Parsons, Melvil Dewey, Secretary of the New York State Board of Regents, was made Chairman. Principal John W. Cook, of Normal, Ill., moved that Mr. W. H. Smiley act as Secretary, and the motion was carried.

Chairman Dewey stated briefly the character of the other departmental organizations of the National Educational Association, and a motion was made, duly seconded and carried, that there be elected a president, vice president and secretary to serve as an executive committee to arrange for work and prepare the programme for the coming year.

The chair was empowered to appoint a Nominating Committee of five members to report to the meeting at its close a list of officers for the ensuing year. The chair appointed on the Nominating Committee, W. R. Eastman, F. A. Hutchins, Jos. E. Russell, Wm. W. Bishop, W. H. Smiley.

The Chairman, after some account of the movement that had led to the organization of the special department and a statement of the objects hoped to be realized, invited full discussion from the point of view of personal experience, of the mutual relationship of school and library, of librarian and teacher.

The following named took part in the discussion: Jos. E. Russell, Wm. W. Bishop, Chas. R. Skinner, Wm. H. Smiley, F. A. Hutchins, O. F. Barbour, W. R. Eastman, C. L. Marsh, Miss Schreiber, R. Jones.

On motion of Mr. Eastman the officers to be elected were made a committee to confer with the officers of the American Library Association as to the best means for co-operation between the two organizations. A resolution was also passed that an invitation be extended to the American Library Association, and to each of the state and local library associations and clubs to send delegates to the annual meetings of the Library Department of the National Educational Association.

A recess of ten minutes was taken to allow a conference of the Nominating Committee. The committee's report was as follows:

President—Melvil Dewey, Albany, N. Y.

Vice President—Supt. J. H. Van Sickle, Denver.

Secretary—Miss M. E. Ahern, of the Library Bureau, Chicago, Ill.

The secretary was empowered to cast the ballot for the persons named in the report and they were declared unanimously elected as officers for 1897.

The meeting then adjourned.

PAPERS AND DISCUSSIONS.

THE NEW LIBRARY DEPARTMENT OF THE NATIONAL EDUCATIONAL ASSOCIATION.

STATEMENT OF THE REQUEST MADE BY MELVIL DEWEY AS REPRESENTING THE LIBRARIANS BEFORE THE EXECUTIVE BOARD AT THE BUFFALO MEETING, JULY 7.

The name of the National Educational Association shows that it is for education in general and not an association of schoolmen alone. Is it not a radical mistake for it to neglect to recognize properly any important part of the American educational system? In the early childhood of most of us the schools were winning their way as an essential part of the American system of public government. Every one approved of schools, but many thought the parents, or at most the organized churches, were abundantly able to make all needed provision for the instruction of youth. That idea has so far passed away that the present generation finds it hard to grasp the idea of a government, either state or local, without provision for free public schools.

The same process is being repeated in these closing years of the century in regard to the free public libraries. Competent students of the subject say that the historian of the future will certainly record this as distinctively the library age and that this close of the 19th century will be as marked for the building and endowment of libraries, and chiefly for their recognition as essential parts of our educational system, as was that century which brought forth the great cathedrals of Europe. It goes without saying that every member of the National Educational Association is a lover of books and a friend of libraries. I waste no time over trite commonplaces about the importance of books and reading.

One of your officers reminds me that you have recently recognized the libraries by making them eligible to membership, but the reason given was that they were the most desirable repository for the printed proceedings of this association, where they would be permanently preserved and handed down to posterity. This is recognizing one function of the library, but only a tiny corner of its proper field. It is treating it as an official and reliable bookcase.

Others remind me of how much has been said and done in favor of pedagogic and school libraries. These are admirable and well worth

all the attention they are receiving at your hands, but they too represent only a very limited part of the library field. My plea today is not for this kind of recognition, but for the fact that the library in its best sense is an essential part of any complete educational system, and not merely a thing that is good and useful and highly desirable and worthy of encouragement by all educated men and women. Education is really in two great parts which we might call the school education and the home education. The first is carried on by the five distinct groups of schools: (1) elementary, including the kindergarten, primary and grammar schools; (2) high schools and academies; (3) colleges; (4) professional and technical schools; (5) universities. This to the common mind completes the groups of educational institutions. But we who are more familiar with these things have been forced in these later years to recognize that there is another group just as properly entitled to the name of educational institutions. These are first and most important libraries, (2) museums, (3) clubs, (4) extension teaching, (5) official tests and credentials. The schools of the various grades from kindergarten to university provide for the education of those who can give their time to the institution, although they may be otherwise occupied in holidays, vacations and evenings. The home education is for those who must give the larger part of their time to some other occupation and whose educational work must be done out of the hours of business or labor. We all know that our utmost hope from the public school system is to teach the great mass of boys and girls to read intelligently, with the merest elements of the common English branches. If we are to carry on their education through the rest of life we must do it chiefly by means of free public libraries, the only practicable means of controlling and shaping their reading to the highest ends.

Do not misunderstand my position. So far from believing that the school and the teacher should do this work of the librarian, the result of twenty years of study constantly confirms the opinion that the library and the school should be distinctly separated. The reason for this is obvious. For a generation the common sentiment has been that the school board has as its supreme interest the concerns of the schoolroom. If they are entrusted with the charge of a public library it is almost inevitably treated as a bob to the school kite, and usually receives no such care and consideration as it does in the custody of trustees whose sole business it is to promote the interests of the library. We can not do too much in bringing libraries and schools into the closest harmony and co-operation, but they should be co-workers, each keeping its proper field and giving the co-operation and respect due to its associate, and not drifting into the traditional relation of the

lion and the lamb that lie down together, with the lamb inside the lion.

The librarians have recognized their duty and twenty years ago this summer formed a national association at Philadelphia, which has an almost unequalled record for earnest, conscientious, efficient work.

But we have come to a point where the schools and those whose lives are devoted to education must put out a strong hand and steadily support the work for which the librarians have in the last two decades well prepared the way. We hope that every member of the National Educational Association will be active in his own community in promoting the establishment and proper maintenance of public libraries and in advancing their interests as every good citizen should; but there is a field belonging more distinctively to the schools, as such, to which your attention is invited. Let me review briefly some of our work.

1. *Selection of Books.* With new publications averaging upward of 1,000 volumes per week for the civilized world, and with the millions already printed, it becomes one of the nicest problems before the human mind to select for any reader the book or pamphlet or article from all this mass that will be then and there and to him most useful. If we seldom attain to the perfect solution much has been gained in the effort. Aiming at the sun we may at least hit the moon. There was never a time in the history of the world remotely approximating the amount of work being done in the last few years in the selection of books and in other phases of practical bibliography. Those who have not studied it would be astonished if time permitted me to outline some of these efforts, local, state, national and international.

2. *Publication.* In the same way there has never before been so much time and money given to making known the results of the work done in selection. In this state we are publishing probably 50,000 little pamphlets of hand books yearly, whose principal mission is to disseminate this information of the most desirable reading, accompanied in most cases by annotations.

3. *Supply of Books.* After selection and publication obviously it is essential that those wishing to read should be supplied with the desired literature, and never was so much being done as now by the state, by local taxation, and by gifts of individuals. Free libraries are springing up all over the country and doing a beneficent work. The statistics of the growth in numbers and usefulness are inspiring reading to one able to interpret them correctly.

The old proverb has it that you may lead the horse to water but you cannot compel him to drink; and we may select, and make known the list by publication, and provide the books without money and with-

out price in every corner of the land, but little will be accomplished unless the people can be given a taste for reading. No one has ever ventured to suggest, I believe, a compulsory education act which should require people to patronize the public libraries. Our friends who believe so strongly in optionals and the pure elective system have full sway in this field, and what we do must be done by creating a thirst for the best literature, so that our people may avail themselves of the privileges provided.

Even a wayfaring man can see here the duty of the school in library work. By law the children are put under your influence in their earlier years when, if ever, they can be taught to love good books so well that all their lives thereafter they will seize on every opportunity to read them. If the librarians with their wing of the educational army can select and catalogue and provide free of cost the best on every subject, the schoolmen with their wing and with their immensely larger resources both of money and men, and still better of devoted women, must send out from the schools, year by year, boys and girls who will be life-long patrons of the public library, and will, in due time, help to send their own children along the paths which have proved for them so profitable and pleasant.

The National Educational Association is wisely more and more careful about multiplying new departments. I am in full sympathy with the refusal of the governing body to dignify every interesting subject by creating a new department. But I submit to you today that the question of libraries as related to education is so largely the most important that even those most conservative must vote to give the assistance and support of this National Association to systematic organized work, with all the dignity that can come from a separate, strong department. Its field should cover fully school and pedagogic libraries, and all these smaller matters that have enlisted the sympathy and interest of our members; but its great work should be the practical recognition that education is no longer for youth and for a limited course, in a school to which they give most of their time, but that it is really a matter for adults as well as youth, for life and not for the course, to be carried on at home as well as in the schools, and to be taken up in the hours or minutes of leisure as the proper accompaniment of their regular business or labor. This means that education must be carried on by means of reading, and that if the librarians are to furnish the books and give all necessary help in their proper field, the schools must furnish the readers.

This new department, for the establishment of which I hope we may have a unanimous vote coupled with the personal pledge of these directors that each will do all in his power to help, should properly

include at our annual meetings therefore all questions that pertain to literature and reading, as well as those distinctly labeled libraries. I doubt if it would be wise to give much time to discussion of technical library economy or bibliography, for which abundant provision is already made in the American Library Association, and in the twenty or more state and local societies. The library department ought to attract each year to its meetings all who are earnestly interested in the systematic improvement of the reading of our people, whether they care for the technicalities of librarianship or not.

The attitude of our own state in this matter and of the ideal toward which she is working as rapidly as circumstances allow, illustrates my position. We, eight years ago, distinctly recognized what we are asking you, officially, to recognize today. All the laws bearing on this subject have since been rewritten and restated to conform to these new ideals. Our state library has been opened over double the number of hours and made available to scholars and educational institutions throughout the state. We have maintained with a yearly growing success a school with a two years' course for the sole purpose of training competent librarians. We three years ago established—the first of its kind, I think—a distinct public school library department in our state government, which has \$25,000 a year for its support, and devotes all its energies to promoting the public library interests of New York. It began with a single inspector and a clerk, but has grown in three years to require the whole time of twelve people, and I venture to say that no public money is yielding a larger return in the practical good accomplished. We have now nearly 300 traveling libraries moving about from point to point throughout the state, stimulating the desire for permanent collections, providing the choicest books without charge for every man, woman and child in the communities which send for them, and accomplishing beneficent work which I am glad to see being copied in many other states. I should not forget that the idea of the traveling library has been taken up by our department of public instruction under Superintendent Skinner, who has from the first sympathized greatly in all this work, and that New York provides a teachers' library for the free use of any of the 30,000 men and women engaged in its public schools. This is carried on as a part of the school library work for which the state gives \$55,000 more each year.

We have just taken, what to my mind, is the most important step in the series. For years we have been looking for a man whose tastes and training fitted him pre-eminently for this peculiar work, and we have with us here today Professor Richard Jones, of Swarthmore College, who has just accepted the appointment as Literature

Inspector in the University of the State of New York. In our preliminary conversation, when he asked me to define in the fewest words what his duty would be, I replied that it would be his life work to give New York justly the reputation of reading more good books to the acre than any other spot on the planet. This is in no spirit of emulation, but we see no reason why we should not set as high a standard, nor why any place could justly be expected to have good literature more freely available or more largely used than here in the richest state of the most prosperous country in the world. Some of the agencies which I pointed out as already available for our new inspector's assistance are:

1. The 640 high schools and academies. In these we have divided the traditional study of English literature, giving a special course to American; introduced both the ancient and modern foreign classics in English dress for those who know only their mother tongue, and provided numerous reading courses which will be increased as rapidly as the demand warrants, for those who wish, under competent direction, to be helped to a greater familiarity with and liking for the best preserved for us in books. Our new inspector will, with competent assistance, try to stimulate the teachers in these 640 schools to do more and better work than ever before in this direction.

2. He will have also our public libraries division, our traveling libraries, the library school, and the state library facilities as his constant allies.

3. In the extension department, organized in this state in recognition of the claims of home education, he will have the summer schools, of which we already have a score doing admirable work; the hundreds of study clubs and reading circles which are dotted all over the state, and which we encourage to systematic continuous work by registering and recognizing as part of the educational machinery as soon as they are willing to do not less than ten weeks of consecutive work on a single subject. He will have also our extension teaching in the regular lecture courses, in vacation and evening schools, and in correspondence. All of these agents will be used systematically in helping on the education which can come for most people only by much reading of the best books.

DISCUSSION.

TOPICS:—THE FIELD OF THE LIBRARY DEPARTMENT.

THE RELATION OF THE LIBRARIAN TO THE TEACHER.

MELVIL DEWEY, Albany, N. Y.—A collection of books for every-day use, in every schoolroom, as was stated in the petition to the Board of Directors asking for the formation of this department, is coming to be considered a most essential part of a school building's furniture. But I believe the Board of Directors had a broader purpose in view in granting permission for the organization of this department than the encouragement of the formation of schoolroom libraries; something larger than the encouragement of Boards of Education to furnish pedagogical literature for teachers, and standard literature for students. The schools can do more than this for their boys and girls. The purpose of the board was to recognize the library as a co-worker with the school—the library as standing on an independent footing, under its own board of management, with its own trained executive, the librarian. Such a library can be a more efficient co-worker, for it is more likely through the energy and emulous spirit of its independent board to secure the necessary financial support. I hope to hear from those who can speak from experience on this question of the mutual helpfulness of school and library when each stands on an independent footing. Many special fields of work for the department might be suggested, but I wish to suggest one to which it may with perfect justice lay pre-eminent claim, and that is the field of instruction in literature. During the association we have had this subject before the General Association, and before one or two departments, or round-tables. It seems to me that we may rightfully claim that the field of literature is the peculiar province of this department and that these questions are eminently the ones for discussion here.

Desiring to show just what we are attempting in New York in the supply of good literature, I had brought here this "Traveling Library," as it is called; and on the table at my right are various catalogues of the libraries we now send out, to the small community, the summer hotel, the private club, the hospital for the insane, in brief, wherever good literature is desired. We have some six hundred high schools and we have been crediting pupils for reading courses, from the works in certain of these libraries. From their use in the schools, we soon found communities asking for duplicates of the standard works sent by us in these reading courses. Our motto has been that of the American Library Association, "The best reading for the largest number at the smallest cost." Of all people teachers are the best fitted for finding out what are the needs of their communities, and have the greatest interest in the success of our undertaking.

O. F. BARBOUR, Rockford, Ill.—While I recognize the greater efficiency of a fully equipped library as an aid to our educational work, yet I believe we ought to secure all we can along this line from the boards of education that we have, securing the library with its independent board and skilled librarian as soon as circumstances make it possible.

DR. JOS. E. RUSSELL, University of Colorado, Boulder, Colo.—There is undoubtedly an important field of work for the skilled librarian in helping the teacher to an understanding of what the library may be able to do for him, but I

sincerely believe that most good will result if this department is largely managed and controlled by those whose special business is educational work, who can furnish the answer to many questions which professional librarians desire to have answered, but who will need to be shown how to get together the facts that are desired.

W. W. BISHOP, Lake Forest University, Evanston, Ill.—My sympathies are with the last speaker and I fear with him the danger that might come from having the work of this department made too technical, carried too far from touch with the work of the mass of teachers who are beginning to ask earnestly for the assistance that librarians alone can give. We must try to understand the kind of help most needed and desired.

CHAS. R. SKINNER, Superintendent of Public Instruction, New York.—The success of an army depends upon the support given by the rank and file, non-commissioned and commissioned officers, to the plan and purpose of their general. All must work together. So here we have an attempt to bring school and library into efficient co-partnership. We need both; the latter helping our young people to get good books, the former inducing them to read them. You can, however, do nothing unless the teachers want the books, and here is where the work of the professional librarian can be best utilized. They have the knowledge and must make themselves indispensable to teachers in teaching them the sources of materials for the satisfaction of their own needs. I desire to call attention to what we are doing in New York to help in the solution of the problem. Here is an experimental list of some eight hundred books for teachers. Any teacher can secure any book on this list by writing to us for it, at the cost of return postage. We hope for the time when books will be taken to every pupil in every state in the Union as they now are under this plan to the teacher. We cannot, however, expect, any of us, to have machinery run by passing resolutions. It took an immense amount of hard work to harness the Niagara to machinery in Buffalo. A librarian's work, and a teacher's work, demand brain, heart, often even life; so without flinching we must join hands, in work, in hard work for this department.

F. A. HUTCHINS, Wisconsin.—A most important service of the professional librarian to the rank and file will be the broadening of their ideals of the value of books. More intimate relationship with librarians will greatly increase the vital spirit of their teaching.

MISS SCHREIBER, Milwaukee, Wis.—It seems to me that where the state has made provision for library work through educational boards, as is the case in Wisconsin, it is best to accept such limitations, and continue our work as best we can. I know that if we attempted to change the law in Wisconsin, the children would be dead or beyond the range of our efforts before the change could be effected. My work at Milwaukee would, however, have been far less efficient had it not been for the aid furnished me and other teachers by a skilled librarian detailed for this special purpose.

W. R. EASTMAN.—Our discussion makes clear that the work of the teacher and the librarian are complementary. The results depicted at Milwaukee would not have been secured had there not been the teacher from his point of view correcting or being corrected by the librarian from his point of view. So far as libraries are concerned, there is no doubt whatever of the value to them of independent management and of greater possibilities of ultimate helpfulness to the schools.

ALABAMA—Continued.

1895. MARY A. CAHALAN.
1884. Principal of the Powell School, 2311 4th Ave., Birmingham.
- J. B. CUNNINGHAM.
1886. Principal of Paul Hayne School, 600 S. 27th St., Birmingham.
- CHARLES L. FLOYD, A. B., Univ. of Ga.
1889. Superintendent of Schools, 205 High St., Montgomery.
- JOHN T. GREGORY, C. E., '89, Alabama Polytechnic Inst.
1894. Principal Grammar School, 996 Government St., Mobile.
- ROBERT A. MICKLE, A. B., '86, Davidson Coll., N. Car.
Principal Jefferson St., Grammar School, Mobile.
- KATE E. MOON.
Grammar Department, Public Schools, 110 N. Conception St., Mobile.
- *SOLOMON PALMER, Ph. D., '92, State Nor. Coll. of Ala.
President of Athenaeum College for Girls, East Lake.
- JAMES K. POWERS, A. M., '73, Univ. of Ala.
1888. President State Normal College, Florence.
- JULIA S. TUTWILER.
Principal Alabama Normal College for Girls, Livingston.
- CHARLES BEN VAN WIE, Ph. M., Ph. D., '94, Ill. Wesleyan Univ.
1888. Department of Pedagogics, State Normal College, Florence.
- JOHN D. YERBY, A. B., '79, Southern Univ.
1894. Superintendent of Schools, 996 Government St., Mobile.
- *Deceased.

ARIZONA.

ACTIVE MEMBERS.

1895. THEO. B. COMSTOCK, B. Sc., '70, D. Sc., '86, Cornell Univ.
Ex-President University of Arizona, Prescott.
- LYDIA L. HUNT.
1889. Superintendent U. S. Indian Boarding School, San Carlos.
- JAMES MCNAUGHTON, A. B., '62, A. M., '65, Ph. D., '87, Allegheny Coll.
1895. Principal Territorial Normal School, Tempe.

ARKANSAS.

ACTIVE MEMBERS.

1887. THOMAS A. FUTRALL, A. M., Univ. of Tenn.
Superintendent of Schools, Marianna.
1890. JOSIAH H. SHINN, A. B., A. M., '70, Northwestern Univ.
Editor "Southern School Journal," 2121 Cumberland St., Little Rock.
1895. GEORGE B. COOK.
Superintendent of Schools, Hot Springs.
- ABBIE W. DRAUGHON.
Teacher in 2nd Primary School, 302 Grand Ave., Hot Springs.
- J. L. HOLLOWAY, A. M., Missouri State Normal.
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Teacher in Sixth Grade, Hall School, 421 N. 2d St., Rockford.
- J. H. FREEMAN, A. M., '88, Bates Coll.
1896. Assist. State Superintendent of Public Instruction, Springfield.
- E. A. GASTMAN.
1896. Superintendent of Schools, 464 W. North St., Decatur.
- WM. M. GIFFIN, A. M., '82, Lawrence Univ., Wis.; Ph. D., '94, State Nor. Coll., N. Y.
1889. Vice Principal Chicago Normal School, 7710 Emerald Ave., Chicago.
- NEWELL D. GILBERT, A. M., '82, Ill. Wes. Univ.
1887. Superintendent of Schools, 413 N. Pine Ave., Austin.
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1886. County Superintendent of Schools, Lanark.
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1890. President of University of Chicago, 59th St. and Ellis Ave., Chicago.

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1895. ELIZABETH HARRISON.
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- W. H. HATCH.
1892. Superintendent of Schools, Oak Park.
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- AMALIE HOFER.
Editor "Kindergarten Magazine," Chicago.
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- F. A. KENDALL.
1885. Principal Ellsworth Sch., Sec'y Ill. Pupils' Reading Circle, cor. Sleight and
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- LESLIE LEWIS, A. B., '66, A. M., '69, Yale.
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1895. W. S. SMYTH, A. M., '66, Wesleyan Univ., Conn.; Ph. D., '76, Syracuse Univ.
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1894. Principal of West Side School, 213, 5th St., Mt. Vernon.
- JOHN H. TEAR, A. M., '96, Ill. Wes. Univ.
1889. Principal Washington School, 846 Walnut St., Chicago.
- FRANK D. THOMSON.
1895. Principal of High School, 228 Tompkins St., Galeburg.
- J. E. TURNER, A. B., '94, A. M., '95, Lincoln Univ.
1896. Principal of High School, 327, 12th St., Alton.
- E. O. VAILE.
Editor of the "Intelligence," Oak Park.
- NATHAN T. VEATCH.
1887. Superintendent of Schools, Rushville.
- ADELAIDE C. WALDO.
1894. Principal Blake School, 1204, 3d Ave., Rockford.
- JENNIE E. WALDO.
1883. Teacher in High School, 1204, 3d Ave., Rockford.
- J. W. WARR.
Editor of "Business Education," 1723, 6th Ave., Moline.
- W. E. WATT.
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- HARRY G. WILSON.
1879. American Book Co., 521 Wabash Ave. Chicago.
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1896. M. E. AHERN.
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- SUSIE J. BALL.
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1896. Principal Gladstone School, Chicago; Residence Hinsdale.
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INDIANA.

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1883. President of Purdue University, 191 Columbia St., Lafayette.

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1871. Editor of "Indiana School Journal," Indianapolis.
- MOSES C. STEVENS, A. M., '83, Earlham Coll.
1883. Professor of Mathematics, Purdue University, 11 Waldron St., W. Lafayette.

INDIANA—*Continued.*

1880. JOHN S. IRWIN, A. B., '42, Western Univ. of Pa.; M. D., '47, Univ. of Pa.; LL.D., '75, Univ. of Ind.
1875. Superintendent of Public Schools, 241 W. Main St., Fort Wayne.

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1885. MARY E. NICHOLSON.
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1891. W. S. ALMOND.
1893. Superintendent of Schools, Corner Monroe and Willson Sts., Delphi.
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1890. Superintendent of Schools, 115 Ferry St., Lafayette.
1893. WM. L. BRYAN, Ph. D., '92, Clark Univ.
1887. Professor of Philosophy; 1893. Vice President, Indiana University, Bloomington.
- ALBERT E. HUMKE.
1891. Superintendent of Schools, Vincennes.
- JOSEPH SWAIN, B. L., M. Sc., Ind. Univ.; LL.D., Wabash Coll.
1893. President of Indiana University, 321 Kirkwood Ave., Bloomington.
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1892. Principal of High School, 223 Park Ave., Indianapolis.
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1887. Superintendent of Schools, Union City.
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1891. Superintendent of Schools, Bluffton.
- GEORGE STOCKTON BURROUGHS, A. B., '73, A. M., '76, Ph. D., '84, D. D.; '87, Princeton; LL.D., '95, Marietta Coll.
1892. President of Wabash College, 506 S. Washington St., Crawfordsville.
- J. A. CARNAGEY, A. M., '84, Hanover Coll., Ind.
Superintendent of Schools, 1039 Franklin St., Columbus.
- T. F. FITZGIBBON.
1890. Advisory Superintendent of Elwood Pub. Schs., 520 E. 2nd St., Bloomington, Ind.
- W. B. FLICK.
1885. County Superintendent of Schools, Room 79, Courthouse, Indianapolis.
- D. M. GETTING.
1895. State Superintendent Public Instruction, 542 Central Ave., Indianapolis.
- DAVID K. GOSS, A. B., '87, Indiana Univ.
1894. Superintendent of Schools, 153 N. East St., Indianapolis.
- W. A. HESTER, A. M., '83, De Pauw Univ.
1894. Supt. of Schools, 7th and Vine Sts., Evansville.
- MARY L. HINSDALE, A. M., '90, Univ. of Mich.
1895. Principal of High School, High School Building, South Bend.
- CYRUS W. HODGIN, A. M., '88, Earlham Coll.
1887. Prof. of History and Political Science, Earlham Coll., 30 Central Ave., Richmond.
- FRANK L. JONES, B. S., '90, N. I. Nor. Sch.
1895. Superintendent of Schools, N. Main St., Tipton.
- MARY E. ROWE.
1895. Teacher in Private School, 335 Park Ave., Indianapolis.
- W. S. ROWE, A. B., '92, DePauw Univ.
1895. Superintendent of Schools, Rising Sun.

*Died Sept. 12, '96.

INDIANA—*Continued.*

1895. JAMES F. SCULL.
1882. Superintendent of Schools, Room 11, Central Building, Rochester.
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1887. Superintendent of Schools, 319 W. Adams St., Muncie.
- W. R. J. STRATFORD, A. B., '85, A. M., '89, Hanover Coll.
Superintendent of Schools, 62 E. 2nd St., Peru.
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Pres. Geo. Stockton Burroughs; Sec'y Henry Z. McLain, Crawfordsville.
- WELFORD D. WEAVER.
1890. Superintendent of Schools, Marion.
- J. B. WISELY, A. B., '90, A. M., '91, Indiana Univ.
1894. Prof. of Grammar and Composition, Indiana State Normal School, Terre Haute.
1896. GEORGE F. BASS.
Ed. "Young People's Journal," Manager "Ind. Young People's Reading Circle,"
Commercial Club Building, Indianapolis.
- MRS. ELIZA A. BLAKER.
Superintendent Indianapolis Free Kindergartens and Domestic Training Schools,
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1896. Instructor in Philosophy, Ind. Univ., 404 N. Walnut St., Bloomington.
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1893. Principal State School for Feeble Minded, Fort Wayne.
- JOSEPH J. MILLS, A. M., Earlham Coll., LL.D., Haverford Coll.
1884. President of Earlham College, Richmond.
- WILLIAM H. WILEY, A. B., '64, A. M., '67, Butler Univ.
1896. Superintendent of Schools, 451 N. 7th St., Terre Haute.
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IOWA.

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1892. Superintendent of Schools, Villisca.
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1891. Superintendent of Schools, 753 17th St., Des Moines.
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1891. Superintendent of Schools, Marion.
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Member of Library Board, Rock Rapids.
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- O. J. LAYLANDER.
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1895. LIZZIE ALLEN.
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1895. Principal of High School, Maynard.
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- GEO. E. ROSE.
1893. Principal of High School, 2020 N. Walnut St., Kansas City.
- THOS. A. SAWHILL, A. B., '74, Amherst Coll.
Editor of "Concordia Empire," Concordia.

*Died Sept. 2, 1896.

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 1894. State Superintendent of Public Instruction, Lawrence.
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 1887. Professor of Mathematics, Baker University, Baldwin.
1890. WILLIAM M. DAVIDSON.
 1892. Superintendent of Schools, Topeka.
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- WILLIAM C. STEVENSON.
 1889. Dept. of Bookkeeping and Penman., State Nor. Sch., 1017 Mechanics St., Emporia.
1891. FRANK R. DYER, A. M., '92, Ohio Wesleyan Univ.
 1895. Superintendent of Schools, 514 Topeka Ave., Wichita.
- J. D. ORR.
 1890. Principal Main St. School, 901 Scott Ave., Fort Scott.
1893. FRANCIS HUNTINGTON SNOW, Ph. D., '81, LL.D., '90, Princeton.
 Chancellor of University of Kansas, Lawrence.
1894. DELLA CLARKE.
 Teacher of Music, Emporia.
- ELVA E. CLARKE.
 1893. Librarian of State Normal School, Emporia.
- O. P. M. MCCLINTOCK.
 1892. Principal Jackson School, 1112 Van Buren St., Topeka.
- W. D. ROSS, A. B., A. M., '93, Univ. of Kan.
 1893. Superintendent of Schools, Hartford.
1895. M. A. BAILEY, A. M., '79., Wesleyan Univ. of Conn.
 1885. Teacher of Mathematics, State Normal School, 218 W. 12th Ave., Emporia.
- S. W. BLACK, B. Sc., '81, McKendree Coll., Ill.
 1886. Superintendent of Schools, Pittsburg.
- O. P. BARNES.
 Western Agent, Ginn & Co., Leavenworth.
- JESSIE L. CLARK.
 1892. Supervisor of Music, Public Schools, 1203 N. Market St., Wichita.
- T. W. CONWAY.
 Superintendent of Schools, Arkansas City.
- FENELLA DANA.
 1889. Teacher in Public Schools, 909 Tyler St., Topeka.
- JOHN DIETRICH.
 1893. Superintendent of Schools, 1014 Mechanic St., Emporia.
- N. E. DOLPHIN.
 Superintendent of Schools, Leavenworth.
- MARY HERBERT.
 Teacher in City Schools, Emporia.
- W. H. JOHNSON, A. M., '90, Univ. of Kan.
 1893. Teacher of History of Education, State Normal School, Emporia.
- MRS. NELLIE S. KEDZIE, Grad. Kan. Agri. Coll., '77.
 1882. Professor of Household Economy and Hygiene, Agricultural Coll., Manhattan.
- W. C. LANSDON.
 Teacher of Intermediate Grade Public Schools, Garnett.

KANSAS—Continued.

1895. LEIDA H. MILLS.
1895. Assistant in High Schools, 1203 N. Market St., Wichita.
- Miss M. S. MITCHELL, B. S., Geneva Coll., Penn.
1879. Teacher in Public Schools, 507 W. 6th St., Topeka.
- L. H. MURLIN, A. B., '91, S. T. B., '92, De Pauw Univ.
1894. President Baker University, Baldwin.
- Miss C. S. NEWELL.
1890. Teacher in Third Grade, Public Schools, 817 W. 14th St., Topeka.
- JULIA R. PEARCE, B. Sc., '90, Kan. Agri. Coll.
1894. Librarian State Agricultural College, Manhattan.
- D. E. SANDERS.
President State Normal College, Fort Scott.
- ELLA H. SMITH.
1889. Teacher of Grammar Grade, Jackson School, Topeka.
- DAVID F. SHIRK.
1893. County Superintendent of Public Instruction, 510 Broadway, Abilene.
- MARY E. TABER.
1896. Student State Normal School, 822 Market St., Emporia.
- MRS. A. R. TAYLOR.
1127 Congress St., Emporia.
- *N. B. THOMPSON.
Waterville.
- H. E. WILSON.
1890. Superintendent of Indian School, Netawaka.
1896. CORNELIA CRAFT.
Teacher in Primary School, Downs, Kan.
- HELEN KIMBER.
Vice President International School Teachers' Home Association, Parsons.
- B. D. VAN OSTRAND, B. S., '84, Cornell Univ.
1894. Superintendent of City Schools, Marion.
- E. A. WEYENETH.
Wichita.
- J. J. WILKINSON, Grad. Ill. Nor. Univ.
Emporia.

KENTUCKY.

LIFE MEMBERS.

1877. W. H. BARTHOLOMEW.
1881. Principal of Girls' High School, 426 Gray St., Louisville.
- MRS. LAURA L. MONSARRAT.
Principal of Seventh Ward School, 208 W. Walnut St., Louisville.

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1891. CHARLES H. DIETRICH, B. Sc., '78, Ohio State Univ.
Agent American Book Co., Hopkinsville.
- McHENRY RHODES, A. M., West Ky. Coll.; Ph. M., Hartford Coll.
1891. Superintendent of Schools, 317 Third St., Frankfort.
1892. J. D. COLEMAN, Ph. B., '91 Hartford Coll., Ky.
1892. Principal of High School, 132 Steele St., Frankfort.
- MARY F. DODSON, Grad. '75, Paducah High School.
1880. Assistant Principal High School, 327 N. 4th St., Paducah.
- JAS. E. DORLAND.
1873. Agent American Book Co., 1807 1st St., Louisville.
- GEORGE O. MCBROOM, A. B., '85, Drake Univ., Iowa.
1890. Superintendent of Schools, 1035 Trimble St., Paducah.
1893. H. R. BLAISDELL, Ph. D., '76.
Principal of High School, 910 Scott St., Covington.
- E. H. MARK.
1894. Superintendent of Schools, Center and Walnut St., Louisville.

* Deceased.

KENTUCKY—*Continued.*

1893. JAMES MCGINNIS.
1891. Superintendent of Schools, 522 Frederica St., Owensboro.
1894. SUSIE M. BARTHOLOMEW.
426 E. Gray St., Louisville.
- J. M. N. DOWNS, B. Sc., '86, Glasgow, Ky., Nor. School.
Superintendent of Bellevue Schools, Newport.
- MARY K. KEATING.
1830 W. Jefferson St., Louisville.
- MARY TOWLES SASSEEN.
1888. Principal of Public Schools, 232 Main St., Henderson.
1895. EMMA GRAUMAN.
112 W. Kentucky St., Louisville.
- LIVINGSTONE MCCARTNEY.
1895. Superintendent of Schools, Hopkinsville.
- ALEX L. PETERMAN.
Editor of "The Southern School," Lexington.
- *WILEY T. POYNTER, D. D., '79, Emory and Henry Coll., Va.
Principal Science Hill School, Shelbyville.

LOUISIANA.

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1895. Principal of New Orleans Normal School, 1538 4th St., New Orleans.
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1885. President Silliman Collegiate Institute, Clinton.
1890. ANDREW A. GUNBY.
Monroe.
1892. GEO. SOULÉ.
President of Soulé Commercial College, 603 St. Charles St., New Orleans.
1894. MISS H. A. SUTER.
1878. Vice Principal of McDonough High Sch., No. 2, 1426 St. Andrew St., New Orleans.
1895. WARREN EASTON.
Superintendent of Schools, New Orleans.
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1890. Teacher in Grammar Grade, 1728 4th St., New Orleans.

MAINE.

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1892. W. J. CORTHELL, A. B., '57, A. M., '61, LL.D., '91, Colby Univ.
1878. Principal of Western Normal School, Gorham.
- †1893. L. A. GRAY, A. M., '61, Oberlin Coll.
1864. Principal of Business College, 22 Carleton St., Portland.
1895. JOHN S. LOCKE.
1892. Superintendent of Schools; President York Institute, Saco.
- W. W. STETSON.
1895. State Superintendent of Common Schools, 295 Minot Ave., Auburn.

MARYLAND.

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1875. Vice Principal State Normal School, 1402 Pennsylvania Ave., Baltimore.

ACTIVE MEMBERS.

1885. HENRY A. WISE, Grad. of Va. Military Institute.
1883. Superintendent of Schools, 421 Courtland St., Baltimore.
- *Died July 30, '96.
†Died July 23, '96.

MARYLAND—*Continued.*

1891. JOHN E. MCCAHAN, A. M., '69, Dickinson Coll., Pa.
Assistant Superintendent of Schools, 1719 Hollens St., Baltimore.
1892. E. B. PRETTYMAN, A. B., '48; A. M., '52, Dickinson Coll., Pa.
Prin. State Nor. Sch. and ex-officio State Supt. Pub. Instr. 1200 Lafayette Ave., Baltimore.
1893. JOHN D. WORTHINGTON.
Superintendent Harford County Public Schools, Belair.
1894. ELI M. LAMB.
1864. Principal Friends' Elementary and High School, 937 and 1001-1005 McCulloh St., Baltimore.
RACHEL E. LAMB.
Teacher in Friends' Elementary and High School, 1109 Madison Ave., Baltimore.
1895. W. H. SHELLEY, A. M., Iowa Wesleyan Univ.
1890. Principal of Girls' Latin School, St. Paul and 24th Sts., Baltimore.
H. G. WEIMER.
County Superintendent, Allegheny County, 59 Columbia St., Cumberland.
1896. DANIEL C. GILMAN, LL.D., Yale.
President Johns Hopkins University, Baltimore.
W. H. SADLER.
12 N. Charles St., Baltimore.

MASSACHUSETTS.

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1865. WILLIAM EVARTS SHELDON, A. M., '69, Middlebury Coll., Vt.
1877. Editor of American Teacher, and Bus. Dept., Jour'l. of Edu., 3 Somerset St., Boston.
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- *1864. DANIEL BARNARD HAGER, A. M., '46, Ph. D., '71, Union Coll., N. Y.
1865. Principal of State Normal School, 12 Summer St., Salem.
1870. DANIEL W. JONES.
1859. Master Lowell Grammar School, Boston; 4 Hawthorn St., Roxbury.
1884. JOHN BASCOM, LL.D., '73, Amherst Co.; D. D., '75, Iowa Coll.
1891. Professor of Political Science, Williams College, Williamstown.
1886. WILLIAM A. MOWRY, A. M., Brown Univ.; Ph. D., Bates Coll.
Lecturer and Writer, 17 Riverside Square, Hyde Park.

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1860. Principal State Normal School, Bridgewater.
MRS. MARY DANA HICKS.
1887. Director Prang Normal Art Classes, 646 Washington St., Boston.
- H. E. HOLT.
1868. Supervisor of Music, Boston Public Schools, Box 109, Lexington.
- ARTHUR P. SMITH.
Principal South Grammar School, 11 High St., Waltham.
1891. HENRY W. BLAKE, A. B., '71, A. M., '74, Williams Coll.
Editor of Kindergarten News, care of Milton Bradley Co., Springfield.
- G. STANLEY HALL.
President of Clark University, 94 Woodland St., Worcester.
- D. C. HEATH, A. B., '68, A. M., '71, Amherst Coll.
1876. Educational Publisher, 110 Boylston St., Boston.
- AMY MORRIS HOMANS.
Director Normal School of Gymnastics and Normal School of Household Art, 9 Appleton St., Boston.
- RAY GREENE HULING, A. B., '69, A. M., '72, D. Sc., '94, Brown Univ.
Head Master of English High School, 101 Trowbridge St., Cambridge.
- A. EUGENE NOLEN, A. B., '67, A. M., '70, Yale.
1881. Teacher of Greek and Latin, High School, 3 Wood Place, Fitchburg.
- *Died Aug. 4, '96.

MASSACHUSETTS—*Continued.*

1891. ALVIN F. PEASE, A. B. '75, A. M., '78, Brown Univ.
1888. Superintendent of Schools, 77 Round Hill, Northampton.
- ELIZABETH H. PERRY.
1891. Teacher of Drawing, Normal School, Bridgewater.
- JOHN T. PRINCE, A. M., Ph. D., '89, Leipzig.
Agent Massachusetts Board of Education, West Newton.
- LUCY WHELOCK.
Kindergarten Training, 284 Dartmouth St., Boston.
1892. O. M. BAKER.
Publisher, 499 Main St., Springfield.
- MILTON BRADLEY.
Kindergarten Publisher, Springfield.
- FREDERIC L. BURK, B. L., '83, Univ. of Cal.; A. M., '92, Stanford Univ.
1896. Student Clark University, Worcester.
- JOHN S. CLARK.
Manager of Prang Educational Co., 646 Washington St., Boston.
- CHARLES W. ELIOT, A. B., '53, Harvard; LL.D., '69, Princeton, '70, Yale.
1869. President of Harvard University, Cambridge.
- ROBERT C. METCALF.
1882. Supervisor of Schools, School Committee Rooms, Mason St., Boston.
- WILLIAM W. TAPLEY.
Assistant Manager, Educational Department, Milton Bradley Co., Springfield.
- GEORGE A. WALTON, A. M., Williams Coll.
Agent Mass. Board of Education, Chestnut St., West Newton.
- HENRY N. WHEELER, A. B., '71, A. M., '75, Harvard.
1882. Supt. of Educational Department, Houghton, Mifflin & Co., 4 Park St., Boston.
- ARTHUR K. WHITCOMB, A. B., '73, Dartmouth.
1891. Superintendent of Schools, Lowell.
- ALBERT E. WINSHIP.
Editor of "Journal of Education," 3 Somerset St., Boston.
1893. FRANCIS COGSWELL, A. M., '81, Harvard.
1874. Superintendent of Schools, 257 Prospect St., Cambridge.
- FRANK IRVING COOPER.
53 Devonshire St., Boston.
- GEO. B. KILBON.
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- GEORGE H. MARTIN, A. M., '81, Amherst Coll.
1892. Supervisor of Schools, Boston, 388 Summer St., Lynn.
- WILL S. MONROE, A. B., '94, Stanford Univ., Cal.
1896. Instructor in Pedagogy and Psychology, State Normal School, Westfield.
- CHARLES C. RAMSAY, A. B., '92, A. M., '92, Harvard.
Principal of B. M. C. Durfee High School, 424 Prospect St., Fall River.
- EDWIN P. SEAVER, A. M., LL.B., Harvard.
1880. Superintendent of Schools, School Committee Rooms, Boston.
1894. FRED W. ATKINSON, B. A., '90, Harvard; Ph. D., '93, Leipzig.
1894. Principal of High School, 95 Elliott St., Springfield.
- FREDERICK ELMER CHAPMAN.
1891. Director of Music, Cambridge Public Schools, 126 Oxford St., North Cambridge.
- EDGAR O. SILVER, A. B., '83, A. M., '86, Brown Univ.
Publisher, President of the Corporation Silver, Burdette & Co., 110-112 Boylston St., Boston.
1895. SARAH LOUISE ARNOLD.
1895. Supervisor of Schools, Rooms of School Committee, Mason St., Boston.
- THOMAS M. BALLIET.
1887. Superintendent of Schools, 47 Vernon St., Springfield.
- EUGENE BOUTON, A. B., '75, A. M., '80, Yale; Ph. D., '81, Syracuse.
1894. Superintendent of Schools, 60 Elizabeth St., Pittsfield.
- J. E. BURKE.
1894. Superintendent of Schools, Lawrence.
- C. F. CARROLL.
1894. Superintendent of Schools, 666 Main St., Worcester.
1895. LARKIN DUNTON, LL.D., '80, Colby Univ.
1872. Head Master of Boston Normal School, 16 Ashford St., Allston, Boston.

MASSACHUSETTS—*Continued.*

1895. S. T. DUTTON, A. B., Yale.
1890. Superintendent of Schools, Colborne Crescent, Brookline.
- GEORGE R. FOWLER, A. B., Dartmouth Coll.; LL.B., Albany Law School.
1894. Member of School Board, 220 Devonshire St., Boston.
- ISAAC FREEMAN HALL.
1895. Superintendent of Schools, Box 793, North Adams.
- PAUL H. HANUS, B. Sc.
Asst. Prof. of History and Art of Teaching, Harvard Univ., 60 Buckingham St., Cambridge.
- ALBERT BUSHNELL HART, A. B., '80, Harvard; Ph. D., Freiburg, Baden.
1887. Assistant Professor of History, Harvard University, 15 Appian Way, Cambridge.
- HARVARD UNIVERSITY.
Pres., Chas. W. Eliot; Cor. Sec'y, Richard Cobb, Cambridge.
- FRANK A. HILL, A. B., '62, A. M., '65, Lit. D., '94, Bowdoin.
1894. Secretary State Board of Education, 366 Harvard St., Cambridge.
- AUSTIN H. KENERSON.
Agent for Ginn & Co., 13 Tremont Place, Boston.
- ALONZO MESERVE.
1886. Master of Bowdoin School, 87 Linden St., Allston, Boston.
- CHARLES H. MORSS, A. B., '80, A. M., '82, Harvard.
1895. Superintendent of Schools, Medford.
- JAMES PHINNEY MUNROE, B. Sc., '82, Mass. Inst. of Technology.
Author, 179 Devonshire St., Boston.
- CHAS. W. PARMENTER, A. B., '77, A. M., '86, Ph. D., '95, Tufts Coll.
1894. Head Master of Mechanic Arts High School, Boston; 19 Fayette St., Cambridgeport.
- BARNESS ROSE POSSE.
1892. Editor "Posse Gymnasium Journal," 23 Irvington St., Boston.
- MARA L. PRATT, M.D.
1896. Medical Director of Durant Gymnasium, Boston.
- JOHN G. THOMPSON, A. B., '86, A. M., '94, Dartmouth Coll.
1895. Principal of State Normal School, 55 Garnet St., Fitchburg.
- HENRY WHITTEMORE, A. B., '66, Dartmouth Coll.
1883. Superintendent of Schools, 34 Appleton St., Waltham.
1896. CHARLES H. AMES.
Educational Publisher, with D. C. Heath & Co., West Newton.
- WILLIAM C. BATES, A. B., Harvard.
Superintendent of Schools, 330 Lincoln Ave., Fall River.
- WALLACE C. BOYDEN, A. B., '83, A. M., '86, Amherst.
1889. Sub-Master Boston Normal School, 221 Walnut St., Newtonville.
- GEO. W. BROWN.
1886. Principal Jackman School, 38 High St., Newburyport.
- MRS. HANNAH JOHNSON CARTER.
1893. Director Prang Normal Art Classes, 68 Westland Ave., Back Bay Station, Boston.
- C. H. CHILDS.
Principal Childs' Business College, 271 High St., Holyoke.
- JENNIE E. IRESON.
185 W. Canton St., Boston.
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1884. Supervisor of Drawing, Public Schools, 3 Harvard Ave., Waltham.
- LINCOLN OWEN, A. B., '89, A. M., '92, Colby Univ.
1893. Master of Rice Training School, 21 Pratt St., Allston, Boston.
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- DUDLEY A. SARGENT, A. B., '73, A. M., '87, S. D., '93, Bowdoin, M. D., '78, Yale.
1879. Director Hemenway Gymnasium, Harvard Univ., 27 Everett St., Cambridge.
- ALBERT A. SILVER, JR.
Firm of Silver, Burdette & Co., 110-112 Boylston St., Boston.
- FRANK SMITH.
Superintendent of Schools, Dover.
- F. E. SPAULDING, A. B., '89, Amherst. Ph. D., '94, Univ. of Leipsic.
1895. Superintendent of Ware Public Schools, 12 Pleasant St., Ware.

MICHIGAN.

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1895. HUGH A. GRAHAM, A. B., '87, A. M., '92, Albion Coll.; A. B., '89, Univ. of Mich.
 1893. Superintendent of Schools, Ontonagon.
 CHARLES G. WHITE, A. B., '73, A. M., '80, Ph. D., '90.
 1884. Superintendent of Schools, Lake Linden.

ACTIVE MEMBERS.

1884. RICHARD G. BOONE, A. M., De Pauw Univ.; Ph. D., Ohio Univ.
 1893. Principal of State Normal School, 730 Forest Ave., Ypsilanti.
 B. A. HINSDALE, A. M., '71, Williams Coll.; Ph. D., '87, Ohio State Univ.; LL. D., '92, Ohio Univ.
 1887. Prof. of Science and Art of Teaching, Univ. of Mich., 74 Washtenaw Ave., Ann Arbor.
 JOHN A. STEWART, A. B., '75, Univ. of Mich.
 1894. Superintendent of Schools, 517 Washington Ave., Bay City.
 1887. WM. AUSTIN ELLIS, Grad. Mich. State Nor. Sch., '83; LL. B., '95, Detroit Coll. of Law.
 1885. Principal of Duffield Grammar School, 258 Park St., Detroit.
 1889. J. L. SNYDER, A. B., '86, Ph. D., '91, Westminster Coll.
 1896. President Mich. State Agricultural College, Agricultural College, P.O.
 1890. FERRIS S. FITCH, A. B., Univ. of Mich.
 Ex-State Superintendent of Public Instruction, 49 Williams St., Pontiac.
 1892. MYRA JONES.
 1883. Supervisor of Drawing, 53 Piquette Ave., Detroit.
 JOHN B. NYKIRK, A. B., A. M., Hope Coll., Mich.
 1895. Professor of English Language and Literature, Hope College, Holland.
 HENRY R. PATTENGILL, B. Sc., '74, Univ. of Mich.
 1893. State Superintendent of Public Instruction, 420 Townsend St., Lansing.
 W. S. PERRY, A. B., '61, A. M., '71, Univ. of Mich.; M. Ped., '90, Mich. State Nor. Sch.
 1870. Superintendent of Schools, 61 Washington St., Ann Arbor.
 EDWIN A. STRONG, A. B., '57, A. M., '61, Union Coll.
 Professor of Physical Sciences, State Normal School, 127 Normal St., Ypsilanti.
 A. W. TRESSLER, A. B., '91, Univ. of Mich.
 1893. Superintendent of Schools, Monroe.
 1893. NETTIE D. KIMBERLIN.
 1890. Supervisor of Physical Training, Public Schools, 78 W. Elizabeth St., Detroit.
 MRS. C. G. WHITE, Ph. B.
 1886. Principal of High School, Lake Linden.
 1894. GEORGIA BARKER, Grad. '87, State Normal School, Mich.
 Principal of Jefferson St. School, 68 Lagrave St., Grand Rapids.
 FLORA A. KEELER.
 1888. Principal of Grant St. School, 59 Grant St., Mt. Clemens.
 E. D. PALMER, A. M., '92, Hillsdale College.
 1895. Commissioner of Schools, Clare Co., Clare.
 W. E. ROBINSON.
 Superintendent of Schools, 73 Willis Ave. E., Detroit.
 DURAND W. SPRINGER, B. Sc., '86, Albion Coll.
 1893. Director Business Department, High School, 48 E. University Ave., Ann Arbor.
 ALLEN S. WHITNEY, A. B., '85, Univ. of Mich.
 Superintendent of Schools, 405 N. Warren St., Saginaw, E. S.
 1895. FREDERICK W. ARBURY, A. B., '83, Univ. of Mich.
 Representing Silver, Burdette & Co., 68 Marshall St., Battle Creek.
 FREDERICK L. BLISS, A. B., '77, Univ. of Mich.
 1887. Principal High School, 46 Alexandrine Ave. E., Detroit.
 EGBERT L. BRIGGS, Ph. B., '95, McKendree Coll., Ill.
 1893. Superintendent of Schools, Coldwater.
 WILLIAM WALLACE CHALMERS, A. B., '87, Univ. of Mich.; A. M., '89, Eureka Coll.; B. Ped., '91, Mich. State Normal.
 1890. Superintendent of Schools, 422 Lyon St., Grand Rapids.

MICHIGAN—Continued.

1895. FRANK W. COOLEY, B. S., '81; M. S., '86, Lawrence Univ.
1893. Superintendent of Schools, Calumet.
- IRA L. FORBES.
1887. Superintendent of Schools, 18 S. Main St., Vassar.
- H. H. FROST, A. B., '85, Univ. of Mich.
1896. Principal of High School, Marquette.
- AUSTIN GEORGE, A. B., '66, A. M., '69, Kalamazoo Coll.; M. Ped., '93,
Mich. State Normal School.
1879. Director Training Department, State Normal School, 111 Normal St., Ypsilanti.
- ADA VAN STONE HARRIS.
1895. Assistant Director Training Department, State Normal School, 502 Cross St., Ypsilanti.
- CARL C. MARSHALL.
2 Holcomb St., Battle Creek.
- LUCY SALOME NORTON.
1891. Teacher of Psychology, Normal School, 41 N. Union St., Grand Rapids.
- S. EMORY WHITNEY.
1885. Principal of Cass School, 23 E. Adams Ave., Detroit.
1896. LEWIS C. CARSON, A. B., '92, Univ. of Mich., A. B., '93, Harvard Univ.
1896. Instructor in Mathematics, Michigan Military Academy, 181 Alexandrine Ave. W., Detroit.
- JAMES W. CUPPLES, A. M., '89, Wesleyan Univ.
1890. Superintendent of Schools, State St., Lapeer.
- HENRY N. FRENCH, A. M., '69 Univ., of Mich.
226 Cedar St., Kalamazoo.
- JAMES M. MANDEVILLE, Grad. Mich. State Normal School.
1891. Principal of Amos School, 278, 24th St., Detroit.
- NIEL S. PHELPS,
President of Ellis Publishing Co., 31 Marshall St., Battle Creek.
- LEW. D. REMINGTON,
1890. Principal of High School, 1020 Adelaide St., Fenton.
- HARRIET M. SCOTT,
1886. Principal Normal Training School, The Alhambra, Detroit.
- T. R. WILCOXSON,
Lansing.

MINNESOTA.

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105 Germania Life Bldg., St. Paul.

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Ex-Prof. of Moral and Mental Phil., Washington Univ., St. Louis, Mo., 2245 Knapp St., St. Anthony Park.
1890. BOARD OF EDUCATION, Independent School District No. 3, Northfield.
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ACTIVE MEMBERS.

1880. D. L. KIEHLE, A. B., '61, A. M., '64, LL.D., '87, Hamilton Coll., N. Y.
1893. Professor of Pedagogy, Univ. of Minn., 2800 Portland Ave., Minneapolis.
1883. IRWIN SHEPARD, A. B., '71, A. M., '74, Ph. D., '93, Olivet Coll., Mich.
1879. President of State Normal School, 118 W. Wabasha St., Winona.
1886. FREDERICK E. STRATTON, A. B., '71, A. M., '74, Williams Coll.; Ph. D., '91, Ill. Wesleyan Univ.
1892. Principal of Academy, Carleton College, Northfield.
1890. ROBERT EDUARD DENFELD, A. B., '76, A. M., '77, Amherst Coll.
1885. Superintendent of Schools, Central High School, Duluth.
1892. VIRGIL G. CURTIS, A. M., Tufts Coll.
1896. Superintendent of Schools, St. Paul.

MINNESOTA—Continued.

1893. LYDIA HOOPER.
1895. Teacher in Public Schools, 320, 27th Ave. W., Duluth.
- CHAS. M. JORDAN, Ph. D., '92, Tufts Coll.
1892. Superintendent of Schools, 615 E. 18th St., Minneapolis.
- A. W. RANKIN, A. B., '80, Univ. of Minn.
1895. State Inspector of Graded Schools, 1529 University Ave., Minneapolis.
1894. GEORGE B. AITON, A. B., '81, A. M., '87, Univ. of Minn.
1893. State Inspector of High Schools, 1601 University Ave. S. E., Minneapolis.
- SARAH C. BROOKS.
Supervisor of Kindergartens and Primary Work, 631 Westminster St., St. Paul.
- C. H. CONGDON.
1886. Supervisor of Music, 643 St. Anthony Ave., St. Paul.
- S. A. FARNSWORTH.
1886. Principal of Cleveland High School, 529 Case St., St. Paul.
- LIVINGSTON C. LORD.
1888. President of State Normal School, Moorhead.
- LUCIA M. MILLER.
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- MARY L. OLDS.
1889. Principal of Franklin School, 301 E. 3rd St., Duluth.
- W. W. PENDERGAST, A. M., '93, Bowdoin Coll., Me.
1893. Superintendent of Public Instruction, 6 Market St., Hutchinson.
1895. F. J. BOMBERGER, B. Sc.
1894. Superintendent of Schools, Zumbrota.
- MARY S. CLARKE.
1894. Supervisor of Kindergartens, 924½ E. 2nd St., Duluth.
- FLAVIA DEAN.
Teacher in Grammar Grade, Blue Earth City.
- A. E. ENGSTROM, A. B., '78, A. M., '81, Carleton Coll.
1881. County Superintendent of Schools, Cannon Falls.
- MARGARET GIBBONS.
1884. Primary Teacher Public Schools, 503 Main St. N. E., Minneapolis.
- C. W. G. HYDE.
Assistant State Superintendent of Public Instruction, Capitol, St. Paul.
- G. F. KENASTON, A. B., '78, Dartmouth, A. M., '81, Univ. of Mich.
1894. Superintendent of Schools, 534 Byron St., Mankato.
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- EMMA J. MCGAHN.
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1896. Student, University of Chicago, Benson.
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1880. President State Normal School, Mankato.
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1896. Superintendent of Schools, Melrose.
- WILLIAM G. SMITH.
Editor "School Education," Minneapolis.
- JAS. W. STRONG, A. B., '58, A. M., '61, D. D., '72, Beloit Coll.
1870. President of Carleton College, 108 College Ave., Northfield.
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1872. Supervisor in Public Schools, 451 Marshall Ave., St. Paul.
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1875. Superintendent of School for the Blind, Faribault.
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1892. Primary Teacher Washburn Memorial Home, 50th St., and Nicollet Ave., Minneapolis. Home address, Richfield.
- W. W. HOBBS.
1892. Principal N. S. High School, 48 N. 16th St., Minneapolis.
- LELIA M. JOHNSON.
1888. Teacher in Fifth Grade, 1523 Jefferson St., Duluth.
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1891. Teacher of Latin, High School, Winona.
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1870. Professor of Mathematics and Applied Mechanics, 1879. Director Manual Training School, Washington University, 3013 Hawthorne Bv'd., St. Louis.
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1895. Professor of Greek and Latin, Jackson Training School, Jackson.
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1875. President of State Normal School, 136 E. Market St., Warrensburg.

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1896. Chair. of Pedagogy, State Normal School, Warrensburg.
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1889. President of Missouri Valley College, Marshall.
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1896. Principal of Scarritt School, 3212 Garner Ave., Kansas City.
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1895. President of West Plains College, West Plains.
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1881. Superintendent of Schools 412 E. Franklin St., Clinton.

MISSOURI—*Continued.*

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Professor of Moral Phil., William Jewell College, Liberty.
- LOUIS THEILMANN, B. Sc., '85, M., Sc., '88, Missouri Univ.
1888. Associate Principal of Academy, Appleton City.
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1891. Principal of Public School, Clayton.
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1890. Teacher of Higher Math. and Vice Pres. of Mont. Wesleyan Univ., Univ. Pl. Helena.
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1889. Superintendent of Schools, Missoula.
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President of Mont. College of A. and M. Arts, Bozeman.
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1893. State Superintendent of Public Instruction, Helena.

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1890. Principal of Teachers' Training School, 549 S. 26th Ave., Omaha.
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1890. Editor and Publisher "Northwestern Journal of Education," Rooms 10 and 11 Walsh-Putnam Building, Lincoln.

NEBRASKA—Continued.

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1890. LIZZIE L. BANKER.
1890. Principal of Ward School, 1707 Center St., Omaha.
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1894. State Superintendent of Public Instruction, Lincoln.
1891. ALEXANDER A. MUNRO, A. B., '84, Univ. of Neb.
1887. Superintendent of Schools, 1322 N. 26th St., So. Omaha.
- C. G. PEARSE.
1895. Superintendent of Schools, 508 City Hall, Omaha.
1892. W. K. FOWLER.
1893. Superintendent of Schools, Blair.
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Superintendent of Schools, Box 41, Lexington.
1894. F. A. BARTON.
Deputy State Superintendent of Pub. Inst., Capitol Building, Lincoln.
- EDNA T. MESERVE.
1895. Teacher in Public Schools, 806 Marshal St., McCook.
- D. C. O'CONNOR, A. M., '89, Allegheny Coll., Meadville, Pa.
1892. Superintendent of Schools, 77 Lincoln St., West Point.
- ANNA TIBBETS.
1892. Principal of Grammar School, 658 S. 17th St., Lincoln.
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Instructor in Chemistry, High School, 2619 Capitol Ave., Omaha.
- MRS. GEO. M. TURNER.
2619 Capitol Ave., Omaha.
1895. CHARLES E. BESSEY, B. Sc., '69, Mich. Agr. Coll.; Ph. D., '79, Univ. of Iowa.
1884. Professor of Botany, University of Nebraska, 1504 S St., Lincoln.
- EDWIN J. BODWELL, B. Sc., '88, Dartmouth Coll.
Superintendent of County Schools, Court House, Omaha.
- H. M. BRAYTON.
1892. Superintendent of Schools, Pawnee City.
- W. A. CLARK, A. B., '72, A. M., '85, Pd. D., '94, National Normal Univ.
1895. Instructor in Mathematics, State Normal School, Peru.
- J. W. CRABTREE, B. S., '90, Bloomfield Sci. Inst.
1895. Instructor Mathematics, Univ. of Neb., 19th and T Sts., Lincoln.
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1895. Member Board of Education, 441 N. 10th St., Lincoln.
- IRWEN LEVISTON, A. B., '82, A. M., '88, Dartmouth Coll.
1890. Assistant Principal of High School, 312 N. 21st St., Omaha.
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1895. Professor of Pedagogy, University of Nebraska, 2408 Lynn St., Lincoln.
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1892. Superintendent of Schools, Exeter.
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1887. Principal of Lincoln School, 2115 S. 11th St., Omaha.
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1893. Superintendent of Schools, Crete.
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1893. Superintendent of Schools, 319, N. 11th St., Nebraska City.
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1894. Superintendent of Schools, 510, 14th St., Columbus.
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1889. Professor of Philosophy, Univ. of Neb., Lincoln.

NEVADA.

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 1894. President of State University of Nevada, Reno.

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 1883. Principal of State Normal School, Plymouth.
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 Deerfield Center.

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 1895. Teacher of Drawing, State Normal School, Plymouth.
 J. A. RUSSELL.
 1892. Teacher of History, Geography, and French, State Normal School, Plymouth.
 J. M. RUSSELL, A. M., '88, Wesleyan Univ.
 1894. Principal of High School, Somersworth.

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 1889. Supervisor of Drawing, Public Schools; 1893, Principal Metropolitan Normal Art School, 30 Park St., Jersey City.

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 1890. LEVI SEELEY, A. M., '83, Williams Coll.; Ph. D., '86, Leipzig.
 1895. Professor of Pedagogy, State Normal School, 482 W. State St., Trenton.
 1891. AUGUSTUS SCARLETT.
 1863. Principal of South Eighth Street School, 56 S. 11th St., Newark.
 1892. SARAH Y. ELY.
 1887. Supervisor in High and Grammar Departments of State Model School, 46 Carroll St., Trenton.
 JAMES M. GREEN, A. M., '84, Dickinson Coll.; Ph. D., '90, Ill. Wesleyan Univ.
 1889. Principal of State Normal and Model Schools, Trenton.
 JANE M. LEWIS.
 1866. Principal of Primary School, 99 Mercer St., Jersey City.
 S. E. MANNESS, A. M., '96.
 1890. Supervising Principal, 4th and 5th Districts, 425 Chambers Ave., Camden.
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 1885. Instructor in Greek and Economics, High School, 36 Kearney St., Newark.
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 1892. Superintendent of Schools, 439 W. 6th St. Plainfield.
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 1890. Superintendent of Schools, 707 Grand Ave., Asbury Park.
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 1874. Superintendent of Schools, 14 Clinton Ave., Montclair.
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 1886. Superintendent of Schools, Middlesex Co., New Brunswick.
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 1893. Principal of Franklin Public Schools, Nutley.

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1893. County Superintendent of Schools, 4 Blackwell St., Dover.
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Superintendent of Schools, Newark.
- HENRY E. HARRIS.
1879. Principal School No. 1, 74 Trask Ave., Bayonne.
- LAWRENCE C. HULL, A. B., '77, Univ. of Mich.
1887. Latin Master, Lawrenceville School, Lawrenceville.
- MISS S. M. SEARLE.
1893. Principal of Primary Department Public School No. 23, Cor. Romaine and Pavonia Aves., Jersey City.
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Principal Jas. Wood School, 136 E. Front St., Trenton.
1894. WM. N. BARRINGER, A. M. Princeton; Pd. D., Univ. of City of N. Y.
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1890. Superintendent of Schools, 71 Wallace St., Red Bank.
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1895. Principal School No. 4, 33 Dodge St., Bayonne.
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1893. Teacher in Primary Grade, Chatham.
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1894. Principal School No. 1, Sayreville.
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1885. Principal of Schools, Bound Brook.
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1894. Principal Park Ave. School, 160 Orient Way, Rutherford.
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1891. Superintendent of Schools, 71 Paterson St., New Brunswick.
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1884. Professor of Mathematics, Dr. Julius Sachs Collegiale Institute, Haworth.
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1889. Associate Master Newark Academy, 544 High St., Newark.

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Publisher, Maynard Merrill & Co., 42 E. 10th St., New York City, Residence, E. Orange, N. J.
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1889. Principal of High School, 425 Ave. E., Bayonne City.
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229 Averill Ave., Rochester.

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Author of School Histories and Historical Readers, 343 Adelphi St. Brooklyn.
- *1879. N. A. CALKINS, LL.D., Marietta Coll., Ohio.
1863. Assistant Superintendent of Schools, 124 E. 80th St., New York City.
- † JOHN KRAUS.
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1880. EMILY M. COE.
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1893. UNIVERSITY OF STATE OF NEW YORK.
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†Died Mar. 4, '96.

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1884. ROBERT BINGHAM, A. M., '60, LL. D., '90, Univ. of N. C.
1873. Superintendent of Bingham School, Asheville.

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1895. Superintendent Public Schools, 404 Hillsboro, St., Raleigh.
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Principal State Normal School, Valley City.
- WEBSTER MERRIFIELD, A. B., '77; A. M., '92, Yale.
1891. President of State University of North Dakota, University, Grand Forks Co.
- LURA L. PERRINE, A. B., '80, Albion Coll., Mich.
1892. Teacher of Natural Sciences, State Normal School, Valley City.

OHIO.

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1878. Superintendent of Schools, Marysville.

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1870. MRS. DELIA LATHROP WILLIAMS, *Ped. D.*, '94, State Nor. Coll., Albany, N. Y.
1879. Instructor in Normal Department, Ohio Wesleyan University, Delaware.
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1870. Principal of Kentucky Street School, 94 State St., Cleveland.
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230 Sunset Ave., Dayton.
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1873. Principal of Hughes High School, Cincinnati.
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1874. Superintendent of Schools, 218 W. Ash St., Piqua.
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1889. Superintendent of Schools, Columbus.

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1872. Teacher of Music, Public Schools, 627 E. Mill St., Akron.
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1894. Superintendent of Schools, 190 Euclid Ave., Cleveland.
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1885. Superintendent of Schools, and 1893, Member of State Board of Examiners, Eaton.
- SOPHIE VANCE.
1876. Grammar Department, Van Wert.
1891. ARTHUR OWEN JONES.
1890. Teacher of Drawing, Public Schools, 2315 Highland Ave., Walnut Hills, Cincinnati.
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1894. Special teacher of Physical Culture, Public Schools, 564 Prospect St., Cleveland.
- ELLEN G. REVELEY, *Pd. D.*, '94, State Nor. Coll., Albany, N. Y.
1891. Supervisor of Schools, 190 Euclid Ave., Cleveland.

OHIO—Continued.

1891. CHARLES W. SUPER, A. B., '66, Dickinson Coll.; A. M., '82, Syracuse Univ.; Ph. D., '74, Ill. Wesleyan Univ.; LL. D., '94, Dickinson Coll.
1883. President of Ohio University, '96, Professor of Greek *ibidem*, Athens.
- F. TREUDLEY, A. B., '78, Univ. of Ind.
1885. Superintendent of Schools, 623 Elm St., Youngstown.
- W. J. WHITE.
1888. Superintendent of Schools, 1410 E. 3rd St., Dayton.
1892. H. T. LOOMIS.
Principal of Spencerian Business College, 422 Superior St., Cleveland.
- T. J. MITCHELL, A. B., A. M., Ph. D.
"The Lennox," Cleveland.
- C. C. MILLER.
1895. Superintendent of Schools, 719 W. North St., Lima.
- EDWIN DEVORE RESLER, A. B., '91, Otterbein Univ.
1893. Superintendent of Schools, Westerville.
- N. COE STEWART, F. C. M.
Director of Music, Public Schools, 71 Jennings Ave., Cleveland.
- WM. H. VOGEL.
1886. Assistant Superintendent of Drawing, 1028 Linn St., Cincinnati.
- MATILDA L. WALKER.
Twenty-sixth District School, 471 Riddle Road, Clifton, Cincinnati.
1893. E. R. BOOTH, A. M., '95, Univ. of Wooster.
1889. Principal Technical School, 14th and Elm Sts., Cincinnati.
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1893. Superintendent of Schools, and 1894 Member State Board of Examiners, 20 E. Bowman St., Wooster.
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1880. Superintendent of Schools, Poland.
- MRS. CAROLINE NEWHALL LATHROP.
Principal of Normal School, 9th St., W. of John, Cincinnati.
- H. H. RASCHIG.
1874. Principal of 10th District School, 618 Mound St., Avondale, Cincinnati.
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1893. Superintendent of Schools, 250 4th St., East Liverpool.
- JAMES W. SCOTT, A. B., Duquesne Coll.
1890. Superintendent of Schools, Loudonville.
- WILLIAM H. SCOTT, A. M., '65, Ohio Univ.; LL. D., '84, Ohio Univ. and Ohio Wesleyan Univ.
1883. Professor of Philosophy, Ohio State Univ., 131, 15th Ave., Columbus.
- LUCIA STICKNEY, A. M., '95, Oberlin Coll.
1877. Hughes High School, Cincinnati.
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President of Miami Commercial College, Dayton.
1894. JAMES W. BASHFORD, A. B., '73, A. M., '76, Univ. of Wis.; S. T. B., '76, Ph. D., '81, Boston Univ.; D. D., '90, Southwestern Univ.
1889. President of Ohio Wesleyan University, 23 Oak Hill Ave., Delaware.
- J. REMSEN BISHOP, A. B., '82, Harvard.
Principal of High School, Alpine Place, Walnut Hills, Cincinnati.
- W. W. BOYD, A. B., '84, A. M., '86, Marietta Coll.
1891. Superintendent of Schools, 501, 5th St., Marietta.
- WILLARD T. BUSHMAN, Ph. M., '88, Wooster Univ.
1892. Superintendent of Schools, Van Wert.
- EMMA C. DAVIS.
1893. Supervisor Public Schools, 190 Euclid Ave., Cleveland.
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1894. Professor of Music, College of Music, Cincinnati.
- EDWARD L. HARRIS, A. B., A. M., Ph. B.
1889. Principal of Central High School, Cleveland.
- JULIA A. HARRIS.
1874. Prim. Dept., 13th Dist. School, Cleneay and Spencer Aves., Norwood, Cincinnati.
- CARRIE HOEHM.
Teacher, Cleneay St., Norwood, Cincinnati.

OHIO—Continued.

1894. HARRIET L. KEELER, A. B., '70, Oberlin Coll.
1878. Assistant Central High School, 93 Olive St., Cleveland.
- MARY MCGOWAN.
1888. Teacher in Mornington School, Cincinnati, Madisonville.
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Principal of High School, Newark.
- ELLA M. SNYDER.
1889. Teacher in Grammar Grade, 70 Rose St., Salem.
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1891. President of Miami University, Oxford.
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Instructor in Physics, Central High School, 515 Cedar Ave., Cleveland.
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W. High School, 94 State St., Cleveland.
1895. CHARLES S. BARRETT, B. S., '85, Hopedale Coll., O.
1886. Principal 5th Ave. School, 78 W. 9th Ave., Columbus.
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1895. Teacher in High School, 312 W. 7th Ave., Columbus.
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980. Professor of Rhetoric and English Literature, Ohio Univ., Athens.
- EMMA BROOKE, B. L., Ohio Wesleyan Univ.
1890. Principal of Grammar School, 60 Griswold St., Delaware.
- S. T. DIAL, A. B., '80, A. M., '84, Ohio Wes. Univ.; Ph. D., '94, Syracuse Univ. N. Y.
1890. Superintendent of Schools, Lockland.
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Care of American Book Co., Cincinnati.
- JULIA C. KOLBE.
1896. Primary Teacher, 337 Milton St. Cincinnati.
- ANNIE LAWS.
President Cincinnati Woman's Club, and Rec. Sec., International Kindergarten Union, 818 Dayton St. Cincinnati.
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1896. Superintendent of Schools, 49 Main St., Mechanicsburg.
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1881. Professor of Horticulture and Forestry, Ohio State University, Columbus.
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1888. Head of English Department, Steele High School, 132 Salem St., Dayton.
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1891. Superintendent of Schools, Ashtabula.
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Superintendent of Schools, Centerburg.
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1881. Superintendent of Schools, Gnadenhutten.
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Superintendent of Schools, 409 W. Ray St., New Philadelphia.
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1894. Editor of School Record, 36 N. Market St., Wooster.
- W. W. MCINTIRE, Ph. B., '96, Univ. of Wooster.
1896. Agt. for the John Church Co., 36 N. Market St., Wooster.
- HENRY N. MERTZ, A. B., '70, A. M., '80, Bethany Coll.
1891. Superintendent of Schools, La Belle Ave., Steubenville.
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- CARRIE E. MOORES.
1896. Teacher, College Hill, College Hill, Hamilton Co.
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1873. Superintendent of Schools, Elyria.
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1895. Supervisor of Drawing, 225 Lincoln Ave., Youngstown.
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1888. Superintendent of Schools, 141 Wooster Ave., Canal Dover.

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1895. E. H. PRICHARD.
Teacher in Intermediate Grade, Wyoming, Cincinnati.
- LAURA RESSLER.
1884. Teacher of Primary School, Eaton, Preble Co.
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1893. Superintendent of Schools, Barberton, Summit Co.
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Denison Univ.
1890. Superintendent of Schools, Granville.
- MARGARET W. SUTHERLAND.
1889. Principal of Normal School, 1076 Neil Ave., Columbus.
- CHARLES F. THWING, D. D., LL.D.
Pres. of Western Reserve Univ. and Adelbert Coll., 55 Bellflower Ave., Cleveland.
- STELLA S. WILSON.
1894. Teacher of Chemistry Central High School, 97 N. 20th St., Columbus.
1896. P. J. ANDERSON.
1895. Principal of Franklin School, 101 Garfield Ave., Columbus.
- MRS. P. J. ANDERSON.
Teacher in Kindergarten Department, 101 Garfield Ave., Columbus.
- J. J. BLISS, A. M., '86, Oberlin Coll.
1895. Superintendent of Schools, 518 E. Rensselaer St., Bucyrus.
- G. B. BOLENBAUGH.
Superintendent of Public Schools, New Richmond.
- MARIE L. BRUOT.
1889. Teacher of Elocution and Oratory, 51, 4th Ave., Cleveland.
- HOWARD CHAMPLIN.
1892. Superintendent of Writing, Public Schools, Station D, Walnut Hill, Cincinnati.
- TRESSA M. CORCORAN,
1886. Assist. Principal 8th District, Insko Building, Dayton.
- J. M. FLANNERY.
1890. Superintendent of Schools, Jamestown.
- JENNIE GIFFORD, B. S., '67, A. M., '80, Nat. Nor. Univ., Lebanon, O.
1874. Principal of Preparatory Dept., Buchtel Coll., 107 S. Union St., Akron.
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Superintendent of Public Instruction, 310 E. Main St., Salem.
- LEMIRA W. HUGHES.
1892. Principal Normal Training School, "The Lennox," Cleveland.
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1016 Bay Miller St., Cincinnati.
- F. A. KING.
No. 110 Huntington Place, Mt. Auburn, Cincinnati.
- FRANCES J. KELLY.
1894. Critic Teacher, Cleveland Normal School, 201 Oakdale St., Cleveland.
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Ex-Superintendent of Schools, 1836 E. Tuscarawas St., Canton.
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Superintendent Dept. Physical Educational, Nat. W. C. T. U., Mansfield.
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Teacher of Latin Central High School, 146 Hawthorn Ave., Cleveland.
- ANNIE E. LOGAN.
1896. Teacher in Westwood School, Wardall and Beechwood Aves., Cincinnati.
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734 Richmond St., Cincinnati.
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Principal of High School, 113 Adolph Ave., Akron.
- S. L. ROSE, Graduate N. Nor. Univ.
1896. Superintendent of Schools, 219 N. 2nd St., Hamilton.
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Buchtel College, Akron.
- CLARA G. TAGG.
1891. Principal of South Case School, 26 Hawthorne Ave., Cleveland.
- HARRIET E. TERREL.
1890. Principal of Scranton School, 381 Jennings Ave., Cleveland.

OHIO—*Continued.*

1896. ANNA M. P. TUCKER.
 Prin. of Anna M. P. Tucker School of Ethical and Physical Culture, Cleveland.
 C. L. VAN CLEVE, A. B., A. M., Ohio Wes. Univ., Delaware, O.
 1884. Superintendent of Public Schools, 323 S. Plum St., Troy.

OKLAHOMA.

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 1892. President of University of Oklahoma, Normna.
 1895. J. H. PARKER.
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 1895. Professor of Ethics, University of Oregon, Eugene.
 M. G. ROYAL, A. B., '75, A. M. '78, W. Univ., Salem, Ore.
 1893. President E. N. State Normal School, Weston.

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 1880. EDGAR ARTHUR SINGER.
 1887. Assistant Superintendent of School, 4662 Penn St., Philadelphia
 1884. SARAH A. STEWART.
 1890. Prin. of Kindergarten Training Sch. for Teachers, 1520 Chestnut St., Philadelphia.
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 1887. Principal State Normal School, Millersville.

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 1891. President of Swarthmore College, Swarthmore.
 1891. E. MACKEY, A. B., '78, Mercersburg Coll.
 1896. Boys' High School, Reading.
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 Principal of Primary School, 211 Pine St., Harrisburg.
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 1890. Superintendent of Schools, 1112 Lehman St., Lebanon.

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1892. R. K. BUEHRLE, A. M., '78, Ph. D., '87, Franklin and Marshall Coll., Pa.
1880. Superintendent of Schools, 408 Manor St., Lancaster.
- W. WILBERFORCE DEATRICK, A. B., '76, A. M., '79, Mercersburg Coll.
1891. Professor of Psychology and Pedagogy, Keystone State Normal School, Kutztown.
- H. W. FISHER, Grad. State Nor. Sch., Millersville, Pa.
1875. Supervisor 17th Ward Schools, 350 Lehigh Ave., Pittsburgh.
- JOS. K. GOTWALS.
Superintendent of Schools, 19 E. Chestnut St., Norristown.
- MARY J. LAMBERTON.
1891. Supervising Prin. of George W. Childs Sch., 4403 Osage Ave., West Philadelphia.
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Principal of High School, 324 Cattell St., Easton.
- HERMAN T. LUKENS, A. M., '88, Univ. of Pa.; Ph. D., '91, Jena.
1895. Docent in Psychology, Clark University, Worcester, and Lecturer in Bryn Mawr College, Bryn Mawr, 531 Marshall St., Philadelphia.
- CONSTANCE MACKENZIE.
1887. Director of Public Kindergartens, 3334 Walnut St., Philadelphia.
- JOHN A. M. PASSMORE, M. Sc., '62, State Nor. Sch. Millersville, Pa.
1890. Agent American Book Company, 318 S. 42nd St., Philadelphia.
- S. C. SCHMUCKER, A. M., M. Sc., Muhlenberg Coll., Ph. D., Univ. of Pa.
Professor of Biological Sciences, State Nor. Sch., 610 S. High St., West Chester.
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1883. Principal of Public Schools, Minersville.
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1884. Director of Industrial Art School, 319 N. 32nd St., Philadelphia.
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1883. Superintendent of Schools, 313 Petroleum St., Oil City.
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1893. President of Juniata Coll. and 1894 Prof. of Pedagogy, Univ. of Pa., Huntingdon.
- JAMES A. DEWEY, M. E., '84, State Nor. Sch., Mansfield.
1890. Superintendent of Schools, Newport Township, Wanamie.
- WILLIAM HENRY SAMUEL, Ph. D., '92, Univ. of Pa.
1878. Supervising Principal Public Schools, 2505 N. 12th St., Philadelphia.
- A. THOMAS SMITH, Pd. D., '93, School of Ped., Univ. of N. Y.
1885. Professor of Pedagogy, State Normal School, West Chester.
- PAULINE W. SPENCER.
1893. Teacher of Literature, Girls' Normal School, 3421 Race St., Philadelphia.
1894. LOYAL FREEMAN HALL, M. E. D., State Nor. Sch., Indiana, Pa.
Principal of First Ward Schools, Butler.
- EMMA J. LONGSTRETH, M. E., '76, State Nor. Sch., West Chester Pa.
1894. Teacher of History, Girls' High School, 2103 Park Ave., Philadelphia.
- MISS M. J. MCCracken.
1887. Assistant Principal, Franklin School, 4632 Center Ave., Pittsburgh.
- GEO. MORRIS PHILIPS, A. M., '74, Ph. D., '84, Bucknell Univ.
1881. Principal of State Normal School, West Chester.
- FRANKLIN B. SAWVEL, A. M., Hopedale Coll., Ph. D., '86, Wittenberg Coll.
1890. Professor of English Literature and Philosophy, Thiel College, Greenville.
- CHARLES K. WITMER, A. B., '88, A. M., '91, Franklin and Marshall Coll.
1893. Principal of High School, United States Hotel, Lebanon.
1895. S. H. ALBRO, Ph. D., Colgate Univ.
Principal of State Normal School, Mansfield.
- ALICE M. BENTLEY, Grad., '83, State Normal School, Edinboro.
1886. Teacher in Public Schools, 436 North St., Meadville.
- GEO. HOWARD CLIFF, A. M.
1893. Principal Philadelphia Normal School, 1507 N. 17th St., Philadelphia.
- W. G. GANS.
1892. Supervising Principal of Public Schools, Cornellsville.
- MARY HEINS, B. E., '87, Keystone Nor. Sch., Kutztown.
1887. Teacher in Public Schools, Eschbach.
- JAMES MACALISTER, A. M., LL.D., Brown Univ.; LL. B., Univ. of New York; Officier d'Academie, Paris.
1890. President of Drexel Institute, Philadelphia.

PENNSYLVANIA—Continued.

1895. H. C. MISSIMER, A. B., '69, A. M., '72, Yale.
1890. Superintendent of Schools, Erie.
- MRS. MARY E. MUMFORD.
Member of Board of Public Education, Philadelphia.
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Superintendent of Schools, 111 George St., Pottsville.
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1894. Supt. of Parochial Schools, 48th St. and Lancaster Ave., Philadelphia.
- SYDNEY T. SKIDMORE, A. M., '95, Amherst Coll.
1893. Direc. of Phys. and Chem. Laboratories, Nor. Sch., 1706 N. 18th St., Philadelphia.
- H. M. TRASK.
Agent Silver, Burdette & Co., 1623 Race St., Philadelphia.
1896. J. GEORGE BECHT, M. S., Lafayette Coll.
1893. Superintendent of Lycoming Co., Muncy.
- R. M. CARGO.
1868. Principal Mt. Washington School, 127 Sycamore St., Pittsburg.
- WATSON CORNELL.
Supervising Principal Logan Grammar School, 1605 N. 10th St., Philadelphia.
- R. D. CRAWFORD, M. E. D., Pa. State Nor., Edinboro; A. M., Grove City Coll.
1893. Superintendent of Schools, City Hall, Titusville.
- L. O. FOOSE, A. M., Penn. Coll.
1879. Superintendent of Schools, 705 N. 2nd St., Harrisburg.
- JOHN ARTHUR GIBSON, A. B., '91, Allegheny Coll. •
1896. Superintendent of Schools, Butler.
- GEORGE HOWELL.
Superintendent of Schools, 1007 Scranton St., Scranton.
- W. L. MACGOWAN.
1890. Superintendent of Schools, Office East St. Building, Warren.
- S. R. McCLURE, A. M., '93, Grove City Coll.,
Principal of High School, 616 Jones Ave., Braddock.
- THEODORE B. NOSS, A. M., '82, Ph. D., Syracuse Univ. '83.
1883. Principal State Normal School, California.
- J. N. SMITH.
1876. Principal of 6th Ward School, 18 Franklin St., Allegheny City.
- L. A. THOMAS.
1892. Principal Brushton School, 37th Ward, Pittsburg; 1302 Wood St., Wilkensburg.
- ALMA SAGER WELSH,
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- J. P. WELSH, A. M., Ph. D., Lafayette Coll., Easton, Pa.
1890. Principal State Normal School, Bloomsburg.
- MARGARET CATHARINE ZILLAFRO, M. E. D., State Nor., Sch., Edinboro.
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RHODE ISLAND.

LIFE DIRECTOR.

1882. THOMAS W. BICKNELL, A. M., '60, Brown Univ.; '78, Amherst Coll.; LL.D.;
'84, Drury Coll.
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- *Died Nov. 13, 1896.

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Bascom, John, Mass., 1884, L.
Bashford, James W., Ohio, 1894, A.
Bass, E. E., Miss., 1895, A.
Bass, Geo. F., Ind., 1896, A.
Bates, Emma F., N. D., 1893, A.
Bates, Wm. C., Mass., 1895, A.
Baumgartner, Elizabeth, Ill., 1898, A.
Beach, Wm. H., Wis., 1896, A.
Beadle, Wm. H. H., S. D., 1890, A.
Beal, Wm., Iowa, 1896, A.
Beals, S. DeWitt, Neb., 1876, L.
Beardshear, W. M., Iowa, 1889, A.
Beardsley, A. E., Colo., 1895, A.
Beardsley, Elias J., N. Y., 1892, A.
Beasley, A. W., Ill., 1895, A.
Beattys, Frank D., N. Y., 1894, A.
Becht, J. George, Pa., 1896, A.
Beck, George, Wis., 1884, L.
Beggs, Robert H., Colo., 1884, A.
Belknap, Emmet, N. Y., 1892, A.
Bell, Alex. Graham, D. C., 1884, L.
Bell, Wm. A., Ind., 1876, L.
Beloit City School Board, Wis., 1884, L.
Bemiss, D., Wash., 1895, A.
Bender, Ida C., N. Y., 1895, A.
Benedict, W. H., N. Y., 1892, A.
Bennett, Chas. A., N. Y., 1896, A.
Bennett, C. W., Ohio, 1884, L.
Bennett, Hampton, Ohio, 1880, L.
Bennett, Mrs. Lydia, N. J., 1896, A.
Bentley, Alice M., Pa., 1895, A.
Benton, Geo. W., Ind., 1894, A.
Berlin, A. H., Dela., 1896, A.
Besemer, Ella, Ill., 1896, A.
Bessy, Chas. E., Neb., 1895, A.
Bicknell, Thomas W., R. I., 1882, D.
Billingsley, W. N., Tenn., 1896, A.
Billingsly, J. J., Iowa, 1895, A.
Bingham, Robert, N. C., 1884, L.
Birchard, C. C., N. Y., 1895, A.
Bishop, Eliza A., Pa., 1892, A.
Bishop, J. Remsen, Ohio, 1894, A.
Bishop, Nathan L., Conn., 1895, A.

- Bissell, Annie M., N. Y., 1895, A.
 Black, James C., Ind., 1888, A.
 Black, Wm. H., Mo., 1895, A.
 Black, S. T., Calif., 1895, A.
 Black, S. W., Kan., 1895, A.
 Blair, Jno. J., N. C., 1895, A.
 Blaisdell, H. R., Ky., 1893, A.
 Blake, Henry W., Mass., 1901, A.
 Blaker, Mrs. E. A., Ind., 1896, A.
 Blakesley, O. J., Colo., 1896, A.
 Blakiston, Mary, Ohio, 1895, A.
 Bliss, Frederick L., Mich., 1895, A.
 Bliss, J. J., Ohio, 1896, A.
 Blodgett, A. B., N. Y., 1890, A.
 Board of Ed., Abilene, Kan., 1886, L.
 Board of Ed., Dodge City, Kan., 1886, L.
 Board of Ed., Janesville, Wis., 1884, L.
 Board of Ed., La Crosse, Wis., 1884, L.
 Board of Ed., Milwaukee, Wis., 1884, L.
 Board of Ed., Nashville, Tenn., 1889, D.
 Board of Ed., Northfield, Minn., 1890, L.
 Board of Ed., Oshkosh, Wis., 1884, L.
 Board of Ed., Ottawa, Kan., 1886, L.
 Board of Ed., Sedgwick, Kan., 1886, L.
 Board of Ed., Watertown, Wis., 1884, L.
 Board of Regents, State Nor. Sch., Wis., 1884, L.
 Bodenhamer, D. S., Tex., 1895, A.
 Bodwell, Edwin J., Neb., 1895, A.
 Boger, Cyrus, Pa., 1892, A.
 Bohn, Carrie, Mo., 1890, A.
 Boice, H. B., N. J., 1896, A.
 Bolenbaugh, G. B., Ohio, 1896, A.
 Bomberger, F. J., Minn., 1895, A.
 Bond, G. G., Ga., 1894, A.
 Bond, J. D., Minn., 1896, A.
 Bonebrake, Lewis D., Ohio, 1895, A.
 Boone, Richard G., Mich., 1884, A.
 Booth, E. R., Ohio, 1893, A.
 Bostwick, O. P., Iowa, 1891, A.
 Boughton, Willis, Ohio, 1895, A.
 Bouton, Eugene, Mass., 1895, A.
 Boyd, David R., Okla., 1892, A.
 Boyd, W. W., Ohio, 1894, A.
 Boyden, Albert G., Mass., 1890, A.
 Boyden, Wallace C., Mass., 1896, A.
 Braden, John, Tenn., 1895, A.
 Bradley, Charles A., Colo., 1893, A.
 Bradley, Milton, Mass., 1892, A.
 Bradley, John E., Ill., 1890, A.
 Brayton, H. M., Neb., 1895, A.
 Brennan, Margaret A., N. Y., 1896, A.
 Brier, Warren J., Wis., 1895, A.
 Briggs, Egbert L., Mich., 1895, A.
 Bright, O. T., Ill., 1893, A.
 Broderick, Kate G., N. Y., 1896, A.
 Brooke, Emma, Ohio, 1895, A.
 Brooks, Edward, Pa., 1876, L.
 Brooks, Sarah C., Minn., 1894, A.
 Brown, Adelaide, Mo., 1895, A.
 Brown, C. E., Wis., 1895, A.
 Brown, Elmer E., Cal., 1891, A.
 Brown, Geo. F., Ill., 1880, L.
 Brown, Geo. W., Mass., 1896, A.
 Brown, Geo. W., Ill., 1893, A.
 Brown, Helen M., Colo., 1895, A.
 Brown, Jesse H., Ind., 1891, A.
 Brown, John F., Ind., 1896, A.
 Brown, Le Roy D., Cal., 1888, D.
 Brown, Miss Marion, La., 1889, A.
 Brown, Wm. O., Wis., 1896, A.
 Bruce, Wm. G., Wis., 1893, A.
 Brumbaugh, M. G., Pa., 1893, A.
 Bruot, Marie L., Ohio, 1896, A.
 Bryan, Wm. L., Ind., 1893, A.
 Buchanan, Geo. V., Mo., 1894, A.
 Buchanan, John T., Mo., 1890, A.
 Buehrle, R. K., Pa., 1892, A.
 Bulkley, Julia, Ill., 1895, A.
 Burch, Arthur, Wis., 1896, A.
 Burdick, A. Hall, N. Y., 1892, A.
 Burk, Frederick L., Mass., 1892, A.
 Burke, Mrs. B. Ellen, N. Y., 1894, A.
 Burke, J. E., Mass., 1895, A.
 Burns, James C., Ill., 1895, A.
 Burns, J. J., Ohio, 1880, L.
 Burris, Wm. P., Ind., 1895, A.
 Burroughs, Geo. S., Ind., 1895, A.
 Burton, Albert F., Iowa, 1894, A.
 Burton, R. W., Ill., 1896, A.
 Bushman, Willard T., Ohio., 1894, A.
 Butler, Nicholas M., N. Y., 1885, D.
 Byington, S. Lillian, Ill., 1895, A.
 Cadman, Mrs. Mary, Mo., 1896, A.
 Cahalan, Mary A., Ala., 1896, A.
 Caldwell, H. W., Neb., 1896, A.
 *Calkins, N. A., N. Y., 1879, L.
 Calkins, F. L., Ill., 1895, A.
 Cammack, Ira I., Mo., 1895, A.
 Camp, David N., Conn., 1892, A.
 Campbell, A. G., Kan., 1886, L.
 Canfield, James H., Ohio, 1884, D.
 Cannon, Geo. L., Colo., 1895, A.
 Capen, Frank S., N. Y., 1896, A.
 Cargo, R. M., Pa., 1896, A.
 Carlisle, James M., Tex., 1895, A.
 Carnegie, J. A., Ind., 1895, A.
 Carpenter, J. H., Wis., 1884, L.
 Carpenter, Nellie, Ill., 1896, A.
 Carroll, C. F., Mass., 1895, A.
 Carson, Lewis C., Mich., 1896, A.
 Carter, Mrs. Hannah J., Mass., 1896, A.
 Case, Richard, N. J., 1894, A.
 Casey, Wm. V., Colo., 1895, A.
 Cassidy, Rose, Ill., 1895, A.
 Chadsey, Chas. E., Colo., 1895, A.
 Chalmers, W. W., Mich., 1895, A.
 Champlin, Howard, Ohio, 1896, A.
 Chandler, John W., N. Y., 1890, A.
 Chandler, Willard H., Wis., 1884, L.
 Chapman, Frederick E., Mass., 1894, A.
 Charles, Thomas, Ill., 1896, A.
 *Charlton, Edwin A., Wis., 1884, L.
 Cheever, W. H., Wis., 1896, A.
 Cheney, Augustus J., Ill., 1884, L.
 Cheney, Francis J., N. Y., 1891, A.
 Childs, C. H., Mass., 1896, A.
 Church, George E., R. I., 1892, A.
 Clair, Francis R., N. Y., 1894, A.
 Clancy, Albert W., Ill., 1894, A.
 Clark, Frank H., Colo., 1886, L.
 Clark, Jessie L., Kan., 1895, A.
 Clark, John S., Mass., 1892, A.
 Clark, L. H., Wis., 1884, L.
 Clark, W. A., Neb., 1895, A.
 Clarke, Della, Kan., 1894, A.
 Clarke, Elva E., Kan., 1894, A.
 Clarke, Mary S., Minn., 1895, A.
 Clay, Susan I., Ill., 1894, A.
 Clement, Arthur G., N. Y., 1896, A.
 Cliff, Geo. H., Pa., 1895, A.
 Clute, Oscar, Fla., 1895, A.
 Cobb, Chas. Newell, N. Y., 1894, A.
 Coddington, A. O., Ill., 1893, A.
 Coe, Emily M., N. Y., 1880, L.
 Cogswell, Francis, Mass., 1893, A.
 Colby, E. C., N. Y., 1896, A.
 Cole, Chas. W., N. Y., 1892, A.
 Cole, Wm. H., Ohio, 1870, L.
 Coleman, J. D., Ky., 1892, A.
 Collins, J. H., Ill., 1895, A.
 Columbia University, N. Y., 1895, A.
 Comings, Fannie S., N. Y., 1895, A.
 Comstock, Theo. B., Ariz., 1895, A.
 Congdon, C. H., Minn., 1894, A.
 Conway, Clara, Tenn., 1897, L.
 Conway, T. W., Kan., 1895, A.
 Cook, E. N., N. Y., 1896, A.
 Cook, E. H., N. Y., 1884, D.
 Cook, Elizabeth B., Ill., 1896, A.
 Cook, Geo. B., Ark., 1895, A.
 Cook, John W., Ill., 1890, A.
 Cooley, Mrs. Alice W., Minn., 1896, A.
 Cooley, Frank W., Mich., 1895, A.
 Cooley, Le Roy C., N. Y., 1896, A.
 Cooper, Frank B., Iowa, 1891, A.
 Cooper, Frank Irving, Mass., 1893, A.
 Cooper, Geo., N. Y., 1894, A.
 Cooper, Oscar H., Tex., 1894, A.
 Corbett, Henry R., Neb., 1890, A.
 *Deceased

- Corcoran, Tressa M., Ohio, 1896, A.
 Cornell, L. S., Colo., 1895, A.
 Cornell, Watson, Pa., 1896, A.
 Corson, O. T., Ohio, 1887, A.
 Cortell, W. J., Me., 1892, A.
 Co. Teachers' Asso., Milwaukee, Wis., 1884, L.
 Cox, Edwin B., Ohio, 1889, A.
 Cox, E. Morris, Calif., 1896, A.
 Cox, Henry C., Ill., 1895, A.
 Cox, Martin Luther, N. J., 1893, A.
 Cox, Robert L., N. Y., 1896, A.
 Coy, E. W., Ohio, 1883, L.
 Crabtree, J. W., Neb., 1895, A.
 Craft, Cornelia, Kans., 1896, A.
 Craig, Oscar, Mont., 1892, A.
 Crane Julia E., N. Y., 1895, A.
 Crawford, R. D., Pa., 1896, A.
 Crockett, May M., Ill., 1895, A.
 Cropsey, Miss N., Ind., 1891, A.
 Crosier, M. E., Iowa, 1895, A.
 Crossley, J. J., Iowa, 1895, A.
 Crosthwait, Eliza, Tenn., 1895, A.
 Crouch, Sarah E., Mo., 1895, A.
 Crouse, Mrs. J. N., Ill., 1893, A.
 Cruikshank, James, N. Y., 1894, L.
 Culbertson, E. D. Y., Ia., 1895, A.
 Cummings, Anna A., N. Y., 1896, A.
 Cunningham, J. B., Ala., 1895, A.
 Cupples, J. W., Mich., 1896, A.
 Curran, Ulysses T., N. M., 1866, L.
 Curry, Robert, Neb., 1884, L.
 Curtis, C. C., Minn., 1896, A.
 Curtis, Virgil G., Minn., 1892, A.
 Curtiss, Frederick A., Conn., 1894, A.
 Dana, Fenella, Kan., 1895, A.
 Davidson, Charles C., Ohio, 1880, L.
 Davidson, Wm. M., Can., 1890, A.
 Davis, Allan, D. C., 1895, A.
 Davis, Booth C., N. Y., 1896, A.
 Davis, Buel T., Wis., 1894, A.
 Davis, Emma C., Ohio, 1894, A.
 Davis, Chas. M., N. J., 1893, A.
 Davis, Geo. W., Ill., 1896, A.
 Davis, John W., N. Y., 1895, A.
 Dawes, H. E., Neb., 1896, A.
 Dawson, H. T., N. Y., 1895, A.
 Day, L. W., Ohio, 1888, D.
 Deahl, J. N., W. Va., 1896, A.
 Dean, Flavia, Minn., 1895, A.
 Deane, Chas. W., Conn., 1893, A.
 Deatrick, W. W., Pa., 1892, A.
 De Garmo, Chas. Pa., 1889, A.
 Delano, Edward C., Ill., 1895, A.
 Denfeld, Robert E., Minn., 1890, A.
 Dewey, James A., Pa., 1893, A.
 Dewey, Melvil, N. Y., 1892, A.
 Dial, S. T., Ohio, 1895, A.
 Dick, Fred, Colo., 1895, A.
 Dietrich, Charles H., Ky., 1891, A.
 Dietrich, John, Kan., 1895, A.
 Dillman, L. M., Ill., 1886, A.
 Dillon, Josephine, Colo., 1894, A.
 Dodd, Arthur A., Mo., 1895, A.
 Dodge, Wm. C., Ill., 1896, A.
 Dodson, Mary F., Ky., 1892, A.
 Dofflemeyer, J. J., Iowa, 1894, A.
 Dolph, John M., N. Y., 1896, A.
 Dolphin, N. E., Kans., 1895, A.
 Donohoe, Mary, J., N. J., 1894, A.
 Dorland, James, E., Ky., 1892, A.
 Dougherty, N. C., Ill., 1887, D.
 Dow, J. J., Minn., 1896, A.
 Downing, A. S., N. Y., 1891, A.
 Downs, Edgar R., Colo., 1894, A.
 Downs, J. M., N. Y., 1894, A.
 Doyle, Marie, Wis., 1891, A.
 Dozier, Melville, Cal., 1895, A.
 Draper, Andrew S., Ill., 1888, A.
 Draughan, Abbie W., Ark., 1895, A.
 Dreher, E. S., S. Car., 1896, A.
 Dudgeon, R. B., Wis., 1894, A.
 Dunning, Sara L., N. Y., 1896, A.
 Dunton, Larkin, Mass., 1895, A.
 Dutton, Bettie A., Ohio, 1886, L.
 Dutton, S. T., Mass., 1895, A.
 Dyer, Frank R., Kan., 1891, A.
 Eakins, Mrs. Millie M., Ill., 1896, A.
 Eastman, Wm. R., N. Y., 1896, A.
 Easton, Warren, La., 1895, A.
 Eaton, Ira T., Ill., 1894, A.
 Eaton, John, D. C., 1893, A.
 Eden, Philip, Ia., 1884, L.
 Eggleston, Anna K., N. Y., 1895, A.
 Elder, Ella C., N. Y., 1896, A.
 Elder, E. W., Colo., 1895, A.
 Elgas, Mathew J., N. Y., 1891, A.
 Eliott, Charles W., Mass., 1892, A.
 Elliott, Ella, S. D., 1895, A.
 Ellis, John C., Ill., 1887, A.
 Ellis, Wm. Austin, Mich., 1887, A.
 Ellsworth, Henry W., N. J., 1896, A.
 Elson, W. H., Wis., 1895, A.
 Elwell, Mrs. O. F., N. J., 1896, A.
 Ely, Sarah Y., N. J., 1892, A.
 Emerson, Henry F., N. Y., 1893, A.
 Emery, John Q., Wis., 1884, L.
 English, Rebecca F., Cal., 1888, L.
 Engstrom, A. E., Minn., 1895, A.
 Estes, James A., N. Y., 1896, A.
 Evans, Charles H., Mo., 1886, L.
 Evans, Chas. W., W. Va., 1896, A.
 Evans, Lawton B., Ga., 1894, A.
 Fairchild, E. T., Kan., 1886, L.
 Fairchild, George T., Kan., 1886, D.
 Farley, D. H., N. J., 1896, A.
 Farnsworth, S. A., Minn., 1894, A.
 Farrand, Wilson, N. J., 1895, A.
 Farrell, Edward D., N. Y., 1890, A.
 Farrell, Mrs. E. D., N. Y., 1896, A.
 Fay, Etta J., Minn., 1896, A.
 Felker, Allie M., Cal., 1895, A.
 Fendley, J. M., Tex., 1895, A.
 Fenton, Geo., N. Y., 1896, A.
 Fernald, M. C., Me., 1890, A.
 Fisher, Gilman C., R. I., 1892, A.
 Fisher, H. W., Pa., 1892, A.
 Fisk, Herbert F., Ill., 1891, A.
 Fitch, Ferris S., Mich., 1890, A.
 Fitzgerald, Ella, Ill., 1895, A.
 Fitzgibbon, T. F., Ind., 1895, A.
 Fitzpatrick, Frank A., Mass., 1884, A.
 Flannery, M. J., Ohio, 1896, A.
 Flavin, John T., Wis., 1884, L.
 Fleming, Mary A., N. Y., 1890, A.
 Fleshman, Arthur C., Ill., 1894, A.
 Flick, W. B., Ind., 1895, A.
 Floyd, Chas. L., Ala., 1895, A.
 Foote, L. O., Pa., 1896, A.
 Forbes, Alexander, Ill., 1876, L.
 Forbes, Ira L., Mich., 1895, A.
 Foresman, C. A., Idaho, 1895, A.
 Foresman, Robert, Ill., 1896, A.
 Forrest, J. T., Wash., 1895, A.
 Foshay, James A., Cal., 1893, A.
 Fowler, George R., Mass., 1895, A.
 Fowler, W. K., Neb., 1892, A.
 Fox, Wm. F., Va., 1894, A.
 Frazer, Victor, R. I., 1896, A.
 Freeman, J. H., Ill., 1895, A.
 Freer, H. H., Ia., 1884, A.
 French, Geo. W., N. Y., 1895, A.
 French, Harlan P., N. Y., 1891, A.
 French, Henry N., Mich., 1896, A.
 French, O. E., Iowa, 1895, A.
 Friedberg, William B., N. Y., 1892, A.
 Frost, H. H., Mich., 1895, A.
 Fruchte, Amelia C., Mo., 1896, A.
 Fulcomer, Daniel, Wis., 1894, A.
 Fulton, Robert B., Miss., 1894, A.
 Futrall, Thomas A., Ark., 1887, A.
 Galbreath, L. H., Ill., 1887, A.
 Gamble, Geo. W., Conn., 1896, A.
 Gans, W. G., Pa., 1895, A.
 Gantvoort, A. J., Ohio, 1894, A.
 Garber, J. H., Iowa, 1895, A.
 Garrett, William R., Tenn., 1886, D.
 Garvin, John B., Colo., 1895, A.
 Gastman, E. A., Ill., 1895, A.
 Gault, F. B., Idaho, 1886, A.
 Gayhart, Walter C., Nev., 1895, A.

- Geer, David S., Ill., 1886. A.
 Geer, Louise E., N. Y., 1896. A.
 Geeting, D. M., Ind., 1895. A.
 George, Austin, Mich., 1895. A.
 Gettemy, Mrs. Mary E., Ill., 1892. A.
 Getz, H. L., Iowa, 1896. A.
 Gibbons, Margaret, Minn., 1895. A.
 Gibson, John A., Pa., 1896. A.
 Giffin, W. M., Ill., 1895. A.
 Gifford, Jennie, Ohio, 1896. A.
 Gilbert, C. B., N. J., 1893. L.
 Gilbert, Newell D., Ill., 1895. A.
 Gilchrist, J. C., Iowa, 1880. L.
 Gillan, Silas Y., Wis., 1895. A.
 Gilman, Daniel C., Md., 1896. A.
 Girling, Mrs. Katherine, Ill., 1896. A.
 Gittings, John G., W. Va., 1896. A.
 Glass, E. C., Va., 1894. A.
 Glenn, G. R., Ga., 1895. A.
 Glover, Nathan L., Ohio, 1889. A.
 Goodhue, Lincoln P., Ill., 1893. A.
 Goodknight, J. L., W. Va., 1895. A.
 Goodnough, Walter S., N. Y., 1882. A.
 Gorton, Chas. E., N. Y., 1896. A.
 Goss, David K., Ind., 1895. A.
 Gotwals, Jos. K., Pa., 1892. A.
 Goudy, A. K., Neb., 1895. A.
 Gove, Aaron, Colo., 1888. D.
 Gowans, Margaret, N. Y., 1896. A.
 Graham, Hugh A., Mich., 1895. D.
 Grandy, Mary A., Iowa, 1893. A.
 Grant, H. S., Ill., 1895. A.
 Grattelo, Lucy, Ill., 1896. A.
 Gratz, Simon, Pa., 1879. L.
 Grauman, Emma, Ky., 1895. A.
 Graves, J. A., Conn., 1896. A.
 Gray, Clara M., Mo., 1896. A.
 *Gray, L. A., Me., 1893. A.
 Green, James M., N. J., 1892. A.
 Greene, John A., N. Y., 1893. A.
 Greenlee, Ida K., Mo., 1893. A.
 Greenlee, L. C., Colo., 1892. A.
 Greenwood, J. M., Mo., 1886. D.
 Gregory, Benj. C., N. J., 1894. A.
 Gregory, John T., Ala., 1895. A.
 Griffith, George, N. Y., 1893. A.
 Griggs, Herbert, Colo., 1895. A.
 Gross, Otis, Wis., 1896. A.
 Grossman, John H., Ill., 1895. A.
 Grozmann, M. P. S., N. Y., 1894. A.
 Groves, Chas. W., Ill., 1896. A.
 Groves, Mrs. Chas. W., Ill., 1896. A.
 Guden, Anna J., N. J., 1894. A.
 Gulick, M. Alice, N. J., 1894. A.
 Gunby, Andrew A., La., 1890. A.
 Gunnison, Walter B., N. Y., 1896. A.
 Guss, Roland W., Colo., 1895. A.
 Hadley, Hiram, N. Mex., 1891. A.
 *Hager, Daniel Barnard, Mass., 1864. L.
 Haight, R. A., Ill., 1895. A.
 Hailmann, Mrs. Eudora L., D. C., 1883. A.
 Hailmann, W. N., D. C., 1879. A.
 Hale, Geo. D., N. Y., 1891. A.
 Hall, Caleb G., N. Y., 1885. D.
 Hall, Dana W., Ill., 1891. A.
 Hall, G. Stanley, Mass., 1891. A.
 Hall, Isaac Freeman, Mass., 1895. A.
 Hall, Loyal Freeman, Pa., 1894. A.
 Hallam, Alfred, N. Y., 1896. A.
 Hallock, Joseph A., N. J., 1894. A.
 Halsey, K. H., N. Y., 1895. A.
 Hamilton, James M., Mont., 1895. A.
 Hampton, Eleanor, Ill., 1895. A.
 Hancock, John A., Colo., 1895. A.
 Hand, W. H., S. Car., 1896. A.
 Hanus, Paul H., Mass., 1895. A.
 Hard, M. E., Ohio, 1896. A.
 Harlan, David, Del., 1896. A.
 Harper, William R., Ill., 1895. A.
 Harrington, Mark W., Wash., 1895. A.
 Harris, Ada Van Stone, Mich., 1895. A.
 Harris, Edward L., Ohio, 1894. A.
 Harris, Emma G., R. I., 1892. A.
 Harris, Henry E., N. J., 1893. A.
 Harris, Julia A., Ohio, 1894. A.
 Harris, Mary E., N. Y., 1896. A.
 Harris, T. G., Tex., 1895. A.
 Harris, Wm. N., N. Y., 1896. A.
 Harris, Wm. T., D. C., 1876. D.
 Harrison, Elizabeth, Ill., 1895. A.
 Harrison, W. B., N. Y., 1892. A.
 Hart, Albert Bushnell, Mass., 1895. A.
 Hartigan, Mary S. L., Ill., 1895. A.
 Hartley, E. T., Neb., 1895. A.
 Hartman, Mary, Ill., 1895. A.
 Harvard University, Mass., 1895. A.
 Harvey, G. I., Mo., 1886. L.
 Harvey, L. D., Wis., 1884. L.
 Haslup, Ida B., Colo., 1896. A.
 Hassett, T. J., Ala., 1894. A.
 Hatch, W. H., Ill., 1895. A.
 Hauptert, Chas., Ohio, 1893. A.
 Hawkins, Emily J., N. Y., 1892. A.
 Hawn, Linn Marie, N. J., 1895. A.
 Hayden, P. C., Ill., 1895. A.
 Hayes, Frances C., N. Y., 1896. A.
 Hayes, H. E., N. Y., 1892. A.
 Hayward, Edward, N. Y., 1895. A.
 Hayward, Emily A., Ill., 1884. L.
 Heath, D. C., Mass., 1891. A.
 Hedges, Miss F. C., La., 1895. A.
 Heineken, J. F. D., N. J., 1891. A.
 Heins, Mary, Pa., 1895. A.
 Hendrick, Welland, N. Y., 1895. A.
 Henry, James A., Tenn., 1896. A.
 Herbert, Mary, Kan., 1895. A.
 Hermanns, Ed. F., Colo., 1895. A.
 Hermans, Josephine, Mo., 1896. A.
 Herve, Henry D., N. J., 1896. A.
 Herve, Walter L., N. Y., 1895. A.
 Hess, Wm. C., N. Y., 1896. A.
 Hester, W. A., Ind., 1895. A.
 Hewett, Edwin C., Ill., 1884. L.
 Hewitt, Amelia C., N. J., 1894. A.
 Hicks, Lou Alice, Wis., 1895. A.
 Hicks, Mrs. Mary Dana, Mass., 1890. A.
 Hill, Frank A., Mass., 1895. A.
 Hill, Mary, Wis., 1896. A.
 Himes, Florence B., N. Y., 1894. A.
 Hinemon, J. H., Ark., 1896. A.
 Hinman, Lydia, Iowa, 1895. A.
 Hinsdale, B. A., Mich., 1884. A.
 Hinsdale, Mary L., Ind., 1895. A.
 Hissey, Joseph C., Mo., 1894. A.
 Hitte, Alice E., Neb., 1896. A.
 Hitz, John, D. C., 1886. L.
 Hobbs, W. W., Minn., 1896. A.
 Hobe, Augusta W., Cal., 1889. L.
 Hodgdon, Josephine E., N. Y., 1882. L.
 Hodgkin, Charles E., N. Mex., 1895. A.
 Hodgkin, Cyrus W., Ind., 1895. A.
 Hoehn, Carrie, Ohio, 1894. A.
 Hofer, Amalie, Ill., 1895. A.
 Hoffman, Galus, N. J., 1894. A.
 Hogg, Alex., Tex., 1874. A.
 Hollingsworth, J. L., Fla., 1895. A.
 Holloway, J. L., Ark., 1895. A.
 Holt, H. E., Mass., 1890. A.
 Homans, Amy Morris, Mass., 1891. A.
 Hooper, Lydia, Minn., 1893. A.
 Hooper, Sanford A., Wis., 1889. A.
 Hoose, James H., Cal., 1879. L.
 Hornberger, J. A., Ill., 1895. A.
 Horne, Edwin F., Ark., 1896. A.
 Hougham, Mrs. F. R., Colo., 1896. A.
 Howard, F. E., Conn., 1896. A.
 Howard, Geo. A., Ohio, 1895. A.
 Howe, Edward G., Ill., 1896. A.
 Howe, Edwin J., N. Y., 1896. A.
 Howell, Geo., Pa., 1896. A.
 Howell, Logan D., N. C., 1894. A.
 Hoyt, Judson E., Wis., 1890. A.
 Hulford, Geo. W., Ind., 1894. A.
 Hughes, James, Can., 1890. A.
 Hughes, Miss L. W., Ohio, 1896. A.
 Hughes, Mrs. Marean, Can., 1895. A.
 Huling, Ray Greene, Mass., 1891. A.
 Hull, John, Wash., 1891. L.
 Hull, Lawrence C., N. J., 1893. A.

*Deceased.

- Humke, Albert E., Ind., 1893, A.
 Hunt, Lydia L., Ariz., 1895, A.
 Hunt, Mary H., Mass., 1887, D.
 Hunter, Thomas, N. Y., 1885, L.
 Hurd, George B., Conn., 1888, A.
 Hutton, A. J., Wis., 1884, L.
 Hutton, Chas. E., Cal., 1895, A.
 Hutton, H. H., N. J., 1896, A.
 Hyde, C. W. G., Minn., 1895, A.
 Hyde, Fannie, N. Y., 1896, A.
 Hyde, Mary F., N. Y., 1892, A.
 Ingalls, Will C., N. J., 1894, A.
 Ireson, Jennie, Mass., 1896, A.
 Irwin, John S., Ind., 1886, L.
 Jackman, Wilbur S., Ill., 1895, A.
 Jackson, Mrs. E. R., N. Mex., 1895, A.
 Jackson, Joseph P., Colo., 1895, A.
 Jacobs, Walter Ballou, R. I., 1894, A.
 James, Henry M., Wash., 1884, L.
 Jarnette, Anna K. de Cal., 1877, L.
 *Jav, Walter M., Kan., 1886, L.
 Jenkins, Sara D., N. Y., 1895, A.
 Jenkins, Wm., Ill., 1886, A.
 Jesse, Richard H., Mo., 1892, A.
 Jewett, A. V., Kan., 1886, D.
 Johnson, D. B., S. C., 1895, A.
 Johnson, Ernest Henry, R. I., 1893, A.
 Johnson, Isaac T., Del., 1894, A.
 Johnson, Lelia M., Minn., 1896, A.
 Johnson, S. Arthur, Colo., 1894, A.
 Johnson, W. H., Kan., 1895, A.
 Johnston, E. R., Ind., 1896, A.
 Jones, Arthur O., Ohio, 1891, A.
 Jones, Daniel W., Mass., 1870, L.
 Jones, E. A., Ohio, 1884, A.
 Jones, Edward N., N. Y., 1884, A.
 Jones, Frank L., Ind., 1895, A.
 Jones, Herbert J., N. Y., 1896, A.
 Jones, L. H., Ohio, 1889, A.
 Jones, Mattie, S. Dak., 1894, A.
 Jones, Myra, Mich., 1892, A.
 Jones, Nora, Colo., 1895, A.
 Jones, Richard, N. Y., 1894, A.
 Jones, Wharton S., Tenn., 1887, A.
 Jordan, Chas. M., Minn., 1893, A.
 Judd, L. C., N. Y., 1896, A.
 Kaiser, John, N. Y., 1896, A.
 Kane, T. F., N. Y., 1889, A.
 Kayser, Carl F., N. J., 1894, A.
 Keadin, Kate M., Ohio, 1896, A.
 Keane, John J., D. C., 1889, L.
 Keating, Mary K., Ky., 1894, A.
 Kedzie, Mrs. Nellie S., Kan., 1895, A.
 Keeler, Flora A., Mich., 1894, A.
 Keeler, Harriet L., Ohio, 1894, A.
 Kellogg, Amos M., N. Y., 1890, A.
 Kellogg, Mrs. Eva D., Ill., 1884, A.
 Kelly Francis J., Ohio, 1896, A.
 Kelsey, David M., N. Y., 1891, A.
 Kenaston, G. F., Minn., 1895, A.
 Kendall, F. A., Ill., 1895, A.
 Kendall, F. M., Ill., 1895, A.
 Kenerson, Austin H., Mass., 1895, A.
 Kennedy, James, W., N. J., 1894, A.
 Kenyon, Alpheus B., N. Y., 1896, A.
 Keppler, Mrs. W. S., Fla., 1894, A.
 Kerr, William J., Utah, 1895, A.
 Keyes, Charles H., Cal., 1895, A.
 Keyser, Roland S., N. Y., 1896, A.
 Kiehle, D. L., Minn., 1880, A.
 Kilbourn, Geo. B., Mass., 1893, A.
 Kilbourne, Effie J., Ill., 1895, A.
 Kimber, Helen, Kan., 1896, A.
 Kimberlin, Nettie D., Mich., 1893, A.
 Kincannon, A. A., Miss., 1896, A.
 Kimmel, M. A., Ohio, 1893, A.
 King, F. A., Ohio, 1896, A.
 King, J. E., N. Y., 1896, A.
 King, Rachel, Conn., 1893, A.
 King, Wm. F., Iowa, 1884, A.
 Kinnie, Chas. J., Ill., 1890, A.
 Kinsley, M. H., N. J., 1894, A.
 Kirk, John R., Mo., 1891, A.
 Kirk, Thos. J., Cal., 1895, A.
 *Deceased.
 Kleeberger, George R., Minn., 1895, A.
 Klock, J. E., Mont., 1886, L.
 Knapp, Warren E., Colo., 1890, A.
 Kneil, Thomas R., N. Y., 1895, A.
 Koch, Rose M., Ill., 1895, A.
 Kolbe, Julia C., Ohio, 1895, A.
 Krackowizer, Alice M., Ill., 1895, A.
 Kratz, H. E., Iowa, 1890, A.
 *Kraus, John, N. Y., 1879, L.
 Kraus-Boelte, Mrs. Maria, N. Y., 1896, A.
 Krecsy, Bela, Hungary, 1893, A.
 Krohn, Wm. O., Ill., 1893, A.
 Kruse, Edwina B., Del., 1891, A.
 Lagomarsino, Cynthia, N. Y., 1894, A.
 Laird, Mrs. Ada E., Ohio, 1890, A.
 Lamb, Eli M., Md., 1894, A.
 Lamb, Rachel E., Md., 1894, A.
 Lambert, V. A., Ill., 1895, A.
 Lamberton, Mary J., Pa., 1892, A.
 Lane, Albert G., Ill., 1884, D.
 Lane, Mrs. F. A., Ill., 1894, A.
 Lane, F. H., N. Y., 1896, A.
 Lang, Ossian H., N. Y., 1891, A.
 Lansdon, W. C., Kan., 1895, A.
 Larimer, Henry G., Kan., 1886, L.
 Larkins, Chas. D., N. Y., 1895, A.
 La Taste, Lucien V., Ala., 1894, A.
 Lathrop, Mrs. C. N., Ohio, 1893, A.
 Lavers, E. C., Pa., 1892, A.
 Laws, Annie, Ohio, 1895, A.
 Laylander, O. J., Iowa, 1895, A.
 Layton, S. Herrick, Ohio, 1895, A.
 Lazenby, Wm. Z., Ohio, 1895, A.
 Le Conte, Joseph, Cal., 1895, A.
 Lee, James, N. Y., 1892, A.
 Leet, Elsie E., N. Y., 1896, A.
 Lehman, J. H., Ohio, 1896, A.
 Leipziger, Henry M., N. Y., 1891, A.
 Leiter, Mrs. Frances W., Ohio, 1896, A.
 Lennor, Mary M., Minn., 1895, A.
 Leonard, Albert, N. Y., 1891, A.
 Leovell, Richard M., Miss., 1896, A.
 Leslie, Miss H. S., N. J., 1894, A.
 Leviston, Irwen, Neb., 1895, A.
 Lewis, Leslie, Ill., 1895, A.
 Liddell, Elizabeth, Colo., 1895, A.
 Light, C. M., N. Mex., 1895, A.
 Limerick, A. H., Kan., 1886, L.
 Ling, Chas. J., Colo., 1895, A.
 Lipscomb, Dabney, Miss., 1892, A.
 Locke, John S., 1895, A.
 Logan, Anna E., Ohio, 1896, A.
 Long, E. H., Mo., 1892, A.
 Long, J. L., Tex., 1896, A.
 Longstreth, Emma J., Pa., 1894, A.
 Loomis, H. T., Ohio, 1892, A.
 Loos, Chas. L., Ohio, 1895, A.
 Lord, L. C., Minn., 1894, A.
 Lounsbery, Louise A., N. Y., 1896, A.
 Lovell, Thomas B., N. Y., 1896, A.
 Low, Seth, N. Y., 1895, A.
 Lowe, J. S., Ohio, 1895, A.
 Luckey, Edwin D., Mo., 1894, A.
 Luckey, G. W. A., Mo., 1895, A.
 Lukens, Herman T., Pa., 1892, A.
 Lynch, Chas. P., Ohio, 1896, A.
 Lynch, Wm. H., Mo., 1895, A.
 Lyon, Mrs. E. C., N. Y., 1895, A.
 Lyon, Howard, N. Y., 1896, A.
 Lyte, E. Oram, Pa., 1891, L.
 MacAlister, James, Pa., 1895, A.
 Macdona, Kate P., N. Y., 1895, A.
 MacDonald, John, Kan., 1886, L.
 MacGowan, W. L., Pa., 1896, A.
 Mack, Wm. S., Ill., 1895, A.
 Mackenzie, Constance, Pa., 1892, A.
 Mackey, E., Pa., 1891, A.
 Mackey, Wm. A., N. Y., 1894, A.
 Maharry, S. H., Ohio, 1895, A.
 Malone, W. R., Utah, 1891, A.
 Mandeville, James M., Mich., 1896, A.
 Mankell, Nathalie M., N. Y., 1896, A.
 Manley, R. M., Cal., 1870, L.
 Manness, S. E., N. J., 1892, A.
 *Deceased.

- Marble, A. P., N. Y., 1880, D.
Mardis, S. K., Ohio, 1895, A.
Mark, E. H., Ky., 1893, A.
Marlatt, Abby L., R. I., 1894, A.
Marshall, Carl C., Mich., 1895, A.
Marshall, T. Marcellus, W. Va., 1877, D.
Martin, Anna E., Ill., 1895, A.
Martin, E. O., R. I., 1895, A.
Martin, George H., Mass., 1893, A.
Martin, Harriet A., Ill., 1896, A.
Martin, Kate T., Ill., 1896, A.
Massee, J. Edman, N. Y., 1896, A.
Massey, John E., Va., 1891, A.
Massey, John, Ala., 1894, A.
Mathews, Byron C., N. J., 1892, A.
Mathews, Elizabeth K., Iowa, 1895, A.
Mauck, Joseph W., S. D., 1892, A.
Maurer, G. C., Ohio, 1895, A.
Maxon, Henry M., N. J., 1892, A.
Maxwell, William H., N. Y., 1892, A.
Maycock, Mark M., N. Y., A.
Mayne, D. D., Wis., 1894, A.
McBride, Elizabeth, N. Y., 1895, A.
McBroom, Geo. O., Ky., 1892, A.
McCahaa, John E., Md., 1891, A.
McCartney, Livingston, Ky., 1895, A.
McClintock, O. P. M., Kan., 1894, A.
McClung, J. S., Colo., 1895, A.
McClure, S. R., Pa., 1896, A.
McConnell, J. J., Iowa, 1895, A.
McCoy, Maggie J., Colo., 1895, A.
McCracken, Miss M. J., Pa., 1894, A.
McCulloch, Mary C., Mo., 1892, A.
McDonald, Mary E., Ill., 1896, A.
McElroy, E. B., Ore., 1895, A.
McElroy, M. R., Ohio, 1895, A.
McFadden, O. E., Minn., 1896, A.
McFarland, Geo. A., N. D., 1895, A.
McGahn, Emma J., Minn., 1895, A.
McGinniss, James, Ky., 1893, A.
McGlynn, J. J., Ill., 1895, A.
McGovern, Mary A., N. Y., 1896, A.
McGowan, Mary, Ohio, 1894, A.
McIntire, W. W., Ohio, 1895, A.
McIver, Chas. D., N. Car., 1896, A.
McKee, J., Milford, N. Y., 1895, A.
McKinnon, J. T., Neb., 1895, A.
McLachlan, A. C., N. Y., 1894, A.
McLauchlin, A. L., Ill., 1895, A.
McLean, C. D., N. Y., 1896, A.
McMillan, Reuben, Ohio, 1879, L.
McMillan, Mrs. Reuben, Ohio, 1880, L.
McMillen, Mary, Iowa, 1895, A.
McMurry, F. M., N. Y., 1895, A.
McMurry, Chas. A., Ill., 1890, A.
McMurry, Mrs. Lida B., 1896, A.
McNabb, Mrs. M., Tenn., 1896, A.
McNabb, Bessie, Tenn., 1896, A.
McNaughton, James, Ariz., 1895, A.
McNeal, Florence, Mo., 1892, A.
McNeely, T. E., Mo., 1871, L.
McNeill, I. C., Wis., 1892, A.
McNeill, Mrs. I. C., Wis., 1892, A.
McVicar, Peter, Kan., 1886, L.
Mehan, J. M., Iowa, 1892, A.
Meleney, Clarence E., N. Y., 1896, A.
Merrifield, Webster, N. Dak., 1895, A.
Merrill, Edward C., N. J., 1896, A.
Merrill, Jenny B., N. Y., 1893, A.
Merrill, J. T., Iowa, 1893, A.
Mertz, Henry N., Ohio, 1895, A.
Merwin, Almon G., N. Y., 1894, A.
Merwin, J. B., Mo., 1871, L.
Merz, Henry, Wyo., 1895, A.
Meserve, Alonzo, Mass., 1895, A.
Meserve, Edna T., Neb., 1894, A.
Metcall, Robert C., Mass., 1892, A.
Mezger, Robert, N. Y., 1895, A.
Miami University, Ohio, 1895, A.
Michael, M. J., N. Y., 1895, A.
Mickle, Robert A., Ala., 1895, A.
Miller, A. N., Colo., 1895, A.
Miller, C. C., Ohio, 1892, A.
Miller, G. R., N. Y., 1896, A.
Miller, J. C., Ill., 1896, A.
Miller, Mrs. J. C., Ill., 1896, A.
Miller, J. H., Neb., 1886, L.
Miller, Lewis, Ohio, 1880, L.
Miller, Lucia M., Minn., 1894, A.
Mills, Leida H., Kan., 1895, A.
Milne, James M., N. Y., 1890, A.
Milne, John M., N. Y., 1891, A.
Milne, Wm. J., N. Y., 1892, A.
Mills, Joseph J., Ind., 1896, A.
Millsbaugh, J. F., Utah, 1895, A.
Missimer, H. C., Pa., 1895, A.
Mitchell, M. S., Kan., 1895, A.
Mitchell, T. J., Ohio, 1892, A.
Monsarrat, Mrs. Laura L., Ky., 1877, L.
Monfort, Myra M., Ill., 1896, A.
Monlux, J. B., Calif., 1895, A.
Monnier, May, Ark., 1895, A.
Monroe, Will S., Mass., 1893, A.
Monteser, Frederick, N. Y., 1894, A.
Montfort, R. V. K., N. Y., 1892, A.
Montrose, Otis, N. Y., 1896, A.
Moon, A. W., Ind., 1889, A.
Moon, Kate, E., Ala., 1895, A.
Moore, Dora M., Colo., 1895, A.
Moore, Carrie E., Ohio, 1895, A.
Moreton, J. B., Utah, 1895, A.
Morris, Geo. E., Mass., 1896, A.
Morris, Harriet N., Ill., 1882, L.
Morris, K. Anna, Ohio, 1891, A.
Morrison, Andrew J., Pa., 1881, A.
Morss, Charles H., Mass., 1895, A.
Mowry, William A., Mass., 1886, L.
Mulets, Sara A., Ill., 1896, A.
Mulford, A. Isabel, Mo., 1896, A.
Mumford, Mrs. M. E., Pa., 1895, A.
Munroe, Alexander A., Neb., 1891, A.
Munroe, James, Phinney, Mass., 1895, A.
Murlin, L. H., Kan., 1895, A.
Murphy, Geo. T., Mo., 1891, A.
Murphy, Mary J., Ohio, 1896, A.
Murray, Annie, Mo., 1896, A.
Myers, John A., W. Vir., 1896, A.
Nagel, J. J., Iowa, 1895, A.
Neet, Mrs. Mary V., Mo., 1894, A.
Nelson, N. L. T., Minn., 1895, A.
Newcomb, Leontine T., N. Y., 1890, A.
Newell, A. C., Iowa, 1896, A.
Newell, Miss C. S., Kan., 1895, A.
Newson, H. D., N. Y., 1895, A.
Nichols, Edna, Ill., 1895, A.
Nichols, Fred R., Ill., 1893, A.
Nicholson, Mary E., Ind., 1885, A.
Nightingale, A. F., Ill., 1886, A.
Nolen, A. Eugene, Mass., 1891, A.
Northrop, B. G., Conn., 1884, D.
Norton, Lucy S., Mich., 1895, A.
Norton, A. W., Mo., 1893, A.
Norton, R. C., Mo., 1895, A.
Noss, Theo. B., Pa., 1896, A.
Nowland, Edna, Ill., 1896, A.
Nunn, Janet H., Minn., 1896, A.
Nye, Charles H., Wis., 1884, L.
Nykirk, John B., Mich., 1892, A.
O'Brien, Mrs. Agnes, N. Y., 1894, A.
O'Callaghan, W. F., N. Y., 1894, A.
O'Connor, D. C., Neb., 1894, A.
Olds, Mary L., Minn., 1894, A.
Oldt, F. T., Iowa, 1896, A.
O'Leary, Kate S., Ill., 1895, A.
Olin, Arvin S., Kan., 1890, A.
Olmstead, Emma G., N. Y., 1896, A.
Orr, J. D., Kan., 1891, A.
Osborn, A. S., N. Y., 1896, A.
Osborne, Geo. L., Mo., 1889, A.
Osenbaugh, C. M., Colo., 1895, A.
Osgood, Anna M., Ohio, 1890, A.
O'Shea, M. V., N. Y., 1892, A.
Owen, Lincoln, Mass., 1896, A.
Packard, S. S., N. Y., 1892, A.
Packer, Ella L., Iowa, 1895, A.
Page, R. S., Ill., 1896, A.
Palmer, A. N., Iowa, 1896, A.
Palmer, Charles S., Colo., 1895, A.
Palmer, E. D., Mich., 1894, A.
Palmer, Francis B., N. Y., 1890, A.

- *Palmer, Solomon, Ala., 1895, A.
 Parker, Chas. I., Ill., 1887, D.
 Parker, Charles V., Colo., 1887, A.
 Parker, C. M., Ill., 1895, A.
 Parker, Francis W., Ill., 1880, A.
 Parker, Mrs. Frank S., Ill., 1895, A.
 Parker, Henry M., Ohio, 1895, A.
 Parker, J. H., Okla., 1895, A.
 Parker, W. D., Wis., 1884, L.
 Parkinson, John B., Wis., 1884, L.
 Parmenter, Chas. W., Mass., 1895, A.
 Parr, S. S., Minn., 1895, A.
 Parsons, Cora, Z. Ohio, 1895, A.
 Parsons, H. S., Tex., 1895, A.
 Passmore, John A. M., Pa., 1892, A.
 Patten, Henry R., Mich., 1892, A.
 Patterson, B. F., Pa., 1895, A.
 *Patterson, Susan G., Ind., 1894, A.
 Patton, Cassia, Alaska, 1895, A.
 Patton, Chas. L., N. Y., 1892, A.
 Paxson, Everett E., Mont., 1890, A.
 Payne, W. C., Ill., 1896, A.
 Payne, William H., Tenn., 1892, A.
 Pearce, Julia R., Kan., 1895, A.
 Pearse, C. G., Neb., 1891, A.
 Pease, Alvin F., Mass., 1891, A.
 Pease, N. W., N. J., 1894, A.
 Peaslee, John B., Ohio, 1880, A.
 Pendergast, W. W., Minn., 1894, A.
 Pennell, Calvin S., Minn., 1864, L.
 Perrine, Lura L., N. D., 1895, A.
 Perry, Elizabeth H., Mass., 1891, A.
 Perry, Geo. P., Wis., 1894, A.
 Perry, Walter S., N. Y., 1896, A.
 Perry, W. S., Mich., 1892, A.
 Peterman, Alex. L., Ky., 1895, A.
 Pfeiffer, J. W., Ohio, 1895, A.
 Phelps, Niel S., Mich., 1896, A.
 Phelps, William F., Minn., 1870, D.
 Phillips, Geo. M., Pa., 1894, A.
 Phillips, J. H., Ala., 1888, A.
 Pickard, Josiah L., Iowa, 1886, D.
 Pierce, Mrs. Ella M., R. I., 1896, A.
 Pierce, H. B., Iowa, 1894, A.
 Pierce, Mrs. Ida L., Iowa, 1894, A.
 Pierce, Edward T., Cal., 1887, A.
 Pike, Joshua, Ill., 1891, D.
 Piper, Jonathan, Ill., 1895, A.
 Place, F. R., N. Car., 1896, A.
 Poland, A. B., N. Y., 1892, A.
 Pollock, Susan P., D. C., 1894, A.
 Posse, Baroness Rose, Mass., 1895, A.
 Powell, W. B., D. C., 1892, A.
 Powell, W. F., N. J., 1889, A.
 Power, Gussie, N. Y., 1887, A.
 Powers, James K., Ala., 1895, A.
 *Poynter, Wiley T., Ky., 1895, A.
 Pratt, Mara L., Mass., 1895, A.
 Pray, T. B., Wis., 1894, A.
 Preston, J. R., Miss., 1890, A.
 Prettyman, E. B., Md., 1892, A.
 Prichard, E. H., Ohio, 1895, A.
 Prince, John T., Mass., 1891, A.
 Principals' Association, Wis., 1884, L.
 Principals, Asso., Milwaukee, Wis., 1884, L.
 Pringle, Wm. J., Ill., 1896, A.
 Prillerman, Byrd, W. Va., 1891, A.
 Pritchard, M. T., Mass., 1896, A.
 Pritchett, H. C., Tex., 1892, A.
 Public School Teachers, Janesville, Wis., 1884, L.
 Purdy, Henry S., N. Y., 1891, A.
 Putnam, Mrs. Alice H., Ill., 1893, A.
 Putnam, A. L., Wyo., 1895, A.
 Raab, Henry, Ill., 1884, L.
 Ralston, James M., N. J., 1892, A.
 Ramsey, Charles C., Mass., 1893, A.
 Ramsey, Geo. J., La., 1880, A.
 Rankin, A. W., Minn., 1893, A.
 Raschig, H. H., Ohio, 1893, A.
 Raub, A. N., Del., 1892, A.
 Raymond, Andrew V., N. Y., 1895, A.
 Redfield, Jennie L., Neb., 1895, A.
 Reed, A. A., Neb., 1895, A.
 Reed, Grace, Ill., 1896, A.
 *Deceased.
 Reel, Estelle, Wyo., 1894, A.
 Reeves, C. E., Wash., 1896, A.
 Reid, James, Mont., 1895, A.
 Reid, Mary D., Colo., 1891, A.
 Reinhart, J. Albert, N. J., 1894, A.
 Remington, Lew D., Mich., 1896, A.
 Resler, Laura, Ohio, 1895, A.
 Resler, Edwin D., Ohio, 1892, A.
 Reveley, Ellen G., Ohio, 1891, A.
 Reynolds, Chas. B., Mo., 1895, A.
 Rhoads, McHenry, Ky., 1891, A.
 Rice, Emily A., N. J., 1892, A.
 Rice, Gratia L., N. Y., 1890, A.
 Rice, Harriette L., R. I., 1896, A.
 Rice, J. M., N. Y., 1895, A.
 Rice, Rebecca S., Ill., 1893, A.
 Richards, E. E., Ohio, 1894, A.
 Richards, Zalmon, D. C., 1864, D.
 Richardson, Frank B., Mass., 1896, A.
 Richmond, Sarah E., Md., 1876, L.
 Rickoff, Andrew J., Cal., 1881, D.
 Rickoff, Rebecca D., Cal., 1890, L.
 Riggs, John F., Iowa, 1895, A.
 Riley, Mrs. Matilda E., Mo., 1890, A.
 Rivers, W. W., Ark., 1895, A.
 Robbins, C. W., Mo., 1892, A.
 Robert, James A., Ohio, 1882, L.
 Roberts, Hester A., N. Y., 1894, A.
 Robinson, Albert R., Ill., 1895, A.
 Robinson, Oscar D., N. Y., 1892, A.
 Robinson, W. E., Mich., 1894, A.
 Robinson, W. S., Ohio, 1895, A.
 *Rogers, C. P., Iowa, 1884, A.
 Rogers, Dora B., W. Va., 1896, A.
 Rogers, Josephine E., N. Y., 1893, A.
 Rogers, Revillus R., N. Y., 1895, A.
 Rood, Wilber V., Ohio, 1896, A.
 Roof, F. M., Ala., 1892, A.
 Roop, C. Y., Cal., 1886, L.
 Rose, Geo. E., Kan., 1886, L.
 Rose, S. L., Ohio, 1896, A.
 Ross, W. D., Kan., 1894, A.
 Rothwell, W. R., Mo., 1895, A.
 Rounds, Chas. C., N. H., 1876, L.
 Rounds, Katharine E., N. H., 1894, A.
 Rourke, Mary, Iowa, 1895, A.
 Rowe, Alex. M., S. D., 1894, A.
 Rowe, Mary E., Ind., 1895, A.
 Rowe, W. S., Ind., 1895, A.
 Royal, M. G., Ore., 1896, A.
 Russell, James E., Colo., 1895, A.
 Russell, J. A., N. H., 1894, A.
 Russell, J. M., N. H., 1894, A.
 Ryan, Geo. G., N. J., 1894, A.
 Ryan, Mrs. Kate, Ill., 1896, A.
 Ryon, C. M., N. Y., 1896, A.
 Sabin, Albert R., Ill., 1884, A.
 Sabin, Ellen C., Wis., 1895, A.
 Sabin, Henry, Iowa, 1889, A.
 Sabin, Kate L., Wis., 1895, A.
 Sabin, Mary S., Colo., 1895, A.
 Sadler, W. H., Md., 1896, A.
 Salisbury, Albert, Wis., 1887, A.
 Samuel, Wm. H., Pa., 1893, A.
 Sanders, D. E., Kan., 1895, A.
 Sanford, Henry R., N. Y., 1895, A.
 Sanor, S. D., Ohio, 1893, A.
 Sargent, Eliza A., N. Y., 1896, A.
 Sargent, Dudley A., Mass., 1896, A.
 Sassee, Mary T., Ky., 1894, A.
 Saunders, Sara, A., N. Y., 1896, A.
 Savage, Reed, Ill., 1889, A.
 Sawhill, Thomas A., Kan., 1886, L.
 Sawvel, Franklin B., Pa., 1894, A.
 Scarlett, Augustus, N. J., 1891, A.
 Schaeffer, Nathan C., Pa., 1887, A.
 Schaffner, Alfred T., N. Y., 1895, A.
 Schermerhorn, Jane A., N. Y., 1895, A.
 Schillig, J. W., N. Y., 1894, A.
 Schmucker, S. C., Pa., 1892, A.
 Schneider, Henry G., N. Y., 1895, A.
 Schofield, Martha, S. C., 1891, L.
 Scholfield, Bessie, R. I., 1896, A.
 Schurman, J. G., N. Y., 1896, A.
 *Deceased.

- Schuyler, Aaron, Kan., 1886, L.
 Schuyler, E. H., N. J., 1894, A.
 Scobey, Frank H., N. J., 1894, A.
 Scott, Charles B., N. Y., 1894, A.
 Scott, Emma A., Ill., 1895, A.
 Scott, Harriet M., Mich., 1896, A.
 Scott, James W., Ohio, 1893, A.
 Scott, Marcus W., N. Y., 1894, A.
 Scott, Wm. H., Ohio, 1893, A.
 Scott, O. C., Iowa, 1895, A.
 Scudder, Myron Tracy, N. Y., 1895, A.
 Scull, James F., Ind., 1895, A.
 Searing, Edward, Minn., 1895, A.
 Searle, Miss S. M., N. J., 1893, A.
 Seaver, Edwin P., Mass., 1893, A.
 Seeley, Chas. D., N. Y., 1896, A.
 Seeley, Levi, N. J., 1891, A.
 Seerley, H. H., Iowa, 1884, A.
 Seifert, Eda N., Iowa, 1895, A.
 Sennett, Cora, Iowa, 1896, A.
 Shanahan, Rev. J. W., Pa., 1895, A.
 Sharkey, J. P., Ohio, 1890, A.
 Shaw, Edward R., N. Y., 1893, A.
 Shaw, Samuel, Wis., 1884, L.
 Shawan, J. A., Ohio, 1894, L.
 Shear, S. R., N. Y., 1895, A.
 Shearer, W. J., N. J., 1895, A.
 Sheats, W. N., Fla., 1893, A.
 Sheldon, E. A., N. Y., 1891, A.
 Sheldon, William E., Mass., 1895, L.
 Shelley, W. H., Md., 1895, A.
 Shepard, Irwin, Minn., 1883, A.
 Sheriff, Mrs. Chas. E., Iowa, 1896, A.
 Shields, D. W., W. Va., 1895, A.
 Shinn, Josiah H., Ark., 1890, A.
 Shirk, David F., Kan., 1895, A.
 Shippen, Edward, Pa., 1879, L.
 Shrieves, Emma, Wis., 1896, A.
 Shutts, Geo. C., Wis., 1896, A.
 Siefert, H. O. R., Wis., 1895, A.
 Silke, Lucy, Ill., 1893, A.
 Silver, A. A., Jr., Mass., 1896, A.
 Silver, Edgar O., Mass., 1894, A.
 Sibley, Chas. A., Ill., 1895, A.
 Simonds, H. A., Wis., 1895, A.
 Sinclair, S. B., Canada, 1891, A.
 Singer, Edgar A., Pa., 1880, L.
 Sites, C. M. L., D. C., 1893, A.
 Skidmore, Sydney T., Pa., 1895, A.
 Skinner, Chas. R., N. Y., 1890, A.
 Skinner, W. H., Neb., 1895, A.
 Slade, James P., Ill., 1895, A.
 Slaton, W. M., Ga., 1894, A.
 Slauson, H. M., Ill., 1894, A.
 Smallwood, Mabel E., Ill., 1896, A.
 Smart, James H., Ind., 1877, D.
 Smiley, Wm. H., Colo., 1892, A.
 Smith, Arthur P., Mass., 1890, A.
 Smith, A. Thomas, Pa., 1893, A.
 Smith, Anna T., D. C., 1895, A.
 Smith, Carrie J., Wis., 1895, A.
 Smith, Edward, N. Y., 1892, A.
 Smith, Ella H., Kan., 1895, A.
 Smith, Frank, Mass., 1896, A.
 Smith, Geo. M., S. D., 1895, A.
 Smith, Hester M., Ill., 1895, A.
 Smith, J. Mace, N. Y., 1895, A.
 Smith, J. N., Pa., 1896, A.
 Smith, Mollie Va., W. Va., 1894, A.
 Smith, S. McKee, N. Y., 1896, A.
 Smith, Sydney F., Colo., 1895, A.
 Smith, Walter W., Minn., 1895, A.
 Smith Wm. G., Minn., 1895, A.
 Smyth, W. S., Ill., 1895, A.
 Snow, Francis H., Kan., 1893, A.
 Snow, Miss Bonnie, Minn., 1896, A.
 Snowden, Cora, Mo., 1894, A.
 Snyder, Ella M., Ohio, 1894, A.
 Snyder, Henry, N. J., 1894, A.
 Snyder, J. L., Mich., 1880, A.
 Snyder, Lydia E., Ill., 1895, A.
 Snyder, W. R., Ind., 1895, A.
 Snyder, Z. X., Colo., 1887, A.
 Soldan, F. Louis, Mo., 1877, D.
 Sollitt, Alice E., Ill., 1893, A.
 Soule, George, La., 1892, A.
 Spaulding, F. E., Mass., 1896, A.
 Spaulding, Randall, N. J., 1892, A.
 Spayd, H. H., Pa., 1892, A.
 Spencer, Pauline W., Pa., 1893, A.
 Spencer, Robert C., Wis., 1884, L.
 Spencer, Mrs. Sara A., D. C., 1892, A.
 Springer, Durand W., Mich., 1894, A.
 Squire, Mary F., N. Y., 1896, A.
 Stableton, J. K., Neb., 1892, A.
 Stanley, Edmund, Kan., 1886, L.
 Stark, Joshua, Wis., 1884, L.
 State Historical Society, Wis., 1884, L.
 State Nor. Schl. Athen. Lit. So., Wis., 1884, L.
 State Nor. School, Phila. Soc., Wis., 1884, L.
 State Nor. School, Platteville, Wis., 1884, L.
 State Teachers' Association of Ill., 1890, D.
 Stearns, J. W., Wis., 1884, L.
 Steele, Paul A., D. C., 1896, A.
 Steele, Wm. L., Ill., 1890, A.
 Steere, E. A., Mont., 1896, A.
 Stephens, H. Morse, N. Y., 1896, A.
 Stephenson, Lillie S., Ill., 1895, A.
 Stephenson, N. J., Ill., 1895, A.
 Stern, Menno, N. Y., 1882, L.
 Stetson, W. W., Maine, 1895, A.
 Stevens, E. H., Colo., 1895, A.
 Stevens, Moses C., Ind., 1876, L.
 Stevens, Plowden, Jr., N. Y., 1895, A.
 Stevenson, Wm. C., Kan., 1890, A.
 Stewart, I. N., Wis., 1884, L.
 Stewart, John A., Mich., 1884, A.
 Stewart, Joseph S., Ga., 1895, A.
 Stewart, N. Coe, Ohio, 1892, A.
 Stewart, Ralph A., N. Y., 1896, A.
 Stewart, Sarah A., Pa., 1884, L.
 Stickney, Lucia, Ohio, 1893, A.
 Stockleman, Mary E., Ohio, 1896, A.
 Stockwell, Mrs. Helen, H. Dak., 1894, A.
 Stockwell, Thomas B., R. I., 1891, A.
 Stockwell, Walter L., N. D., 1894, A.
 Stokes, Horace A., Ohio, 1895, A.
 Stone, Mason, F., Vt., 1894, A.
 Stoneroad, Rebecca, D. C., 1896, A.
 Storm, A. V., Iowa, 1894, A.
 Stout, Geo. H., Pa., 1884, A.
 Stout, Isaac H., N. Y., 1890, A.
 Stowell, Corydon, G., Ill., 1896, A.
 Stowell, Thomas B., N. Y., 1891, A.
 Stratford, W. R. J., Ind., 1895, A.
 Stratton, C. C., Ore., 1888, D.
 Stratton, Frederick E., Minn., 1886, A.
 Strauss, W. M., W. Va., 1894, A.
 Strong, Edwin A., Mich., 1892, A.
 Strong, James W., Minn., 1895, A.
 Stubbs, J. E., Nev., 1895, A.
 Stuver, E., Wyo., 1895, A.
 Sudborough, Mrs. Grace B., Neb., 1880, L.
 Sullivan, Christine, Ohio, 1886, A.
 Super, Chas. W., Ohio, 1891, A.
 Suplee, Fannie, Iowa, 1895, A.
 Suter, Anna, Ind., 1890, A.
 Suter, Miss H. A., La., 1894, A.
 Sutherland, Margaret W., Ohio, 1895, A.
 Sutton, W. S., Tex., 1895, A.
 Swain, Joseph, Ind., 1893, A.
 Swart, Rose C., Wis., 1895, A.
 Sylvester, Carrie, Wis., 1895, A.
 Sylvester, C. H., Wis., 1895, A.
 Taber, Mary E., Kan., 1895, A.
 Tadd, J. Liberty, Pa., 1892, A.
 Tagg, Clara G., Ohio, 1896, A.
 Talbot, Henry, Ala., 1892, A.
 Talmage, James E., Utah, 1895, A.
 Tapley, William W., Mass., 1892, A.
 Tarbell, Horace S., R. I., 1891, A.
 Taylor, Almon N., N. Y., 1896, A.
 Taylor, A. R., Kan., 1886, D.
 Taylor, Mrs. A. R., Kan., 1895, A.
 Taylor, Estelle, Ill., 1894, A.
 Taylor, Henry J., Iowa, 1884, L.
 Taylor, Joseph S., N. Y., 1894, A.
 Teachers' Asso. of Cowley Co., Kan., 1884, L.
 Teachers' Asso. of Riley Co., Kan., 1886, L.
 Teachers' Association, Wis., 1884, L.

- Teachers' Corps, Inter. and Upper Sec., Wis., 1884, L.
 Teachers' Corps, Primary Sec., Wis., 1884, L.
 Teachers' Institute, Philadelphia, Pa., 1879, D.
 Tear, John H., Ill., 1895, A.
 Templeton, J. C., Mont., 1894, A.
 Terrel, Harriet, E., Ohio, 1891, A.
 Terry, H. L., Wis., 1896, A.
 Tharpe, F. D., Mo., 1891, A.
 Thayer, Ada F., N. Y., 1896, A.
 Thayer, J. B., Wis., 1884, L.
 Theilman, Louis, Mo., 1895, A.
 Thomas, L. A., Pa., 1896, A.
 Thomas, Miss M. J. B., N. J., 1896, A.
 Thompson, Charles W., Mo., 1894, A.
 Thompson, John G., Mass., 1895, A.
 Thompson, Langdon S., N. J., 1876, L.
 *Thompson, N. B., Kan., 1891, A.
 Thompson, Wm. O., Ohio, 1894, A.
 Thomson, Frank D., Ill., 1895, A.
 Thurber, Chas. H., Ill., 1893, A.
 Thwing, Charles F., Ohio, 1895, A.
 Tibbets, Anna, Neb., 1894, A.
 Tillotson, D. C., Kan., 1896, L.
 Todd, Samuel B., Wis., 1895, A.
 Tower, Elizabeth A., Iowa, 1895, A.
 Tracy, Frank N., Ill., 1896, A.
 Trant, Dr. Amelia Earle, N. Y., 1896, A.
 Trask, H. M., Pa., 1895, A.
 Tressler, A. W., Mich., 1892, A.
 Treudley, F., Ohio, 1891, A.
 Turner, Alfred, Vt., 1895, A.
 Turner, Geo. M., Neb., 1894, A.
 Turner, Mrs. G. M., Neb., 1894, A.
 Turner, J. E., Ill., 1895, A.
 Turner, Marie L., Mo., 1895, A.
 Tuttle, Albert H., Pa., 1895, A.
 Tutwiler, Julia S., Ala., 1895, A.
 Twining, Nathan, Cal., 1884, L.
 Twiss, Geo. R., Ohio, 1894, A.
 Twitchell, Hattie, Wis., 1895, A.
 Twitchell, Wm. S., N. J., 1896, A.
 Underhill, Volney, Ill., 1893, A.
 University of California, 1895, A.
 University of Georgia, Ga., 1895, A.
 University of Missouri, 1895, A.
 University of State of N. Y., 1893, L.
 University of Utah, 1895, A.
 Valle, E. O., Ill., 1895, A.
 Van Aken, Mrs. Geo., N. Y., 1884, L.
 Vance, Sophie, Ohio, 1890, A.
 Van Cleve, C. L., Ohio, 1896, A.
 Vandervort, C. R., Ill., 1896, A.
 Van Liew, Chas. C., Ill., 1894, A.
 Van Ostrand, B. D., Kans., 1896, A.
 Van Rensselaer, Martha, N. Y., 1894, A.
 Van Sickle, James H., Colo., 1892, A.
 Van Wie, Charles B., Ala., 1895, A.
 Vaughn, W. H., Mo., 1896, A.
 Veatch, Nathan T., Ill., 1895, A.
 Vert, Edmund J., S. D., 1895, A.
 Vogel, Wm. H., Ohio, 1892, A.
 Wabash College, Ind., 1895, A.
 Wade, Margaret I., N. J., 1894, A.
 Waldo, Adelaide C., Ill., 1895, A.
 Waldo, Jennie E., Ill., 1895, A.
 Walke, Matilda L., Ohio, 1892, A.
 Walker, P. R., Ill., 1892, A.
 Walker, Samuel L., N. Y., 1896, A.
 Walrath, M. H., N. Y., 1896, A.
 Walsh, J. H., N. Y., 1895, A.
 Walton, Geo. A., Mass., 1892, A.
 Ward, C. W., N. Mex., 1895, A.
 Warnecke, Marie L., Colo., 1892, A.
 Warner, A. B., Iowa, 1894, A.
 Warr, J. W., Ill., 1895, A.
 Waterbury, R. A., N. Y., 1896, A.
 Watt, W. E., Ill., 1895, A.
 Weaver, W. D., Ind., 1895, A.
 Webber, Anna B., Ill., 1895, A.
 Webster, C. I., N. Y., 1891, A.
 Webster, W. F., Minn., 1896, A. *]
 *Deceased.
 Weeks, C. W., Ill., 1895, A.
 Weimer, H. G., Md., 1895, A.
 Welles, Frank E., N. Y., 1895, A.
 Welsh, Alma S., Pa., 1896, A.
 Welsh, J. P., Pa., 1896, A.
 Wentz, Etta L., N. Y., 1896, A.
 Wernick, E. V., Wis., 1895, A.
 Weyeneth, E. A., Kan., 1896, A.
 Wheeler Henry N., Mass., 1892, A.
 Wheelock, Chas. F., N. Y., 1895, A.
 Wheelock, Lucy, Mass., 1891, A.
 Whitcomb, Arthur K., Mass., 1892, A.
 White, Charles G., Mich., 1895, D.
 White, Mrs. C. G., Mich., 1893, A.
 White, Daniel A., Ill., 1895, A.
 White, Emerson E., Ohio, 1870, D.
 White, J. U., Mo., 1896, A.
 White, R. Mabel, Ill., 1895, A.
 White, W. J., Ohio, 1891, A.
 White, W. T., Tenn., 1890, A.
 Whitehead, Mrs. K., N. Y., 1896, A.
 Whitford, William C., Wis., 1881, L.
 Whitman, B. L., D. C., 1895, A.
 Whitney, Allen S., Mich., 1894, A.
 Whitney, M. A., Ill., 1891, A.
 Whitney S. Emory, Mich., 1895, A.
 Whittemore, Henry, Mass., 1895, A.
 Whittle, W. R., R. I., 1896, A.
 Widner, Esther A., Ohio, 1890, L.
 Wilcoxson, T. R., Mich., 1896, A.
 Wiley, Mrs. L. B., Ind., 1896, A.
 Wiley, Wm. H., Ind., 1896, A.
 Wilkins, A. H., Tex., 1894, A.
 Wilkinson, Geo. E., Ill., 1895, A.
 Wilkinson, J. L., Kan., 1896, A.
 Wilkinson, J. N., Kan., 1884, A.
 Williams, Mrs. Delia, Ohio, 1870, L.
 Williams, Philo J., Kan., 1886, L.
 Williams, Samuel G., N. Y., 1891, A.
 Williams, T. E., Ga., 1895, A.
 Williams, Wm. J., Neb., 1895, A.
 Williamson, J. E., Iowa, 1895, A.
 Willis, D. M., W. Va., 1895, A.
 Willis, H. B., N. J., 1892, A.
 Willis, W. A., Iowa, 1894, L.
 Wilson, William E., R. I., 1890, A.
 Wilson, Harry G., Ill., 1895, A.
 Wilson, H. E., Kan., 1895, A.
 Wilson, J. Ormond, D. C., 1880, D.
 Wilson, Stella S., Ohio, 1895, A.
 Wilt, A. D., Ohio, 1893, A.
 Winchell, Harriet N., Ill., 1895, A.
 Winne, James, N. Y., 1892, A.
 Winship, Albert E., Mass., 1892, A.
 Winston, Geo. T., Tex., 1896, A.
 Wise, Henry A., Md., 1885, A.
 Wise, W. J., Colo., 1895, A.
 Wisely, J. B., Ind., 1895, A.
 Witmer, Chas. K., Pa., 1894, A.
 Wolfe, H. K., Neb., 1896, A.
 Wolfe, L. E., Mo., 1890, A.
 Wood, Emory M., Kan., 1889, A.
 Wood, O. M., Mo., 1893, A.
 Woods, Francis M., Ill., 1896, A.
 Woodward, C. M., Mo., 1887, A.
 Woody, H. G., Ind., 1893, A.
 Wooley, L. C., N. J., 1893, A.
 Worthington, John D., Md., 1893, A.
 Wright, A. M., N. Y., 1893, A.
 Wright, Anna J., Ohio, 1894, A.
 Wright, Homer, Ga., 1894, A.
 Wright, Edmund W., N. H., 1889, L.
 Wright, Wm. R., N. J., 1892, A.
 Wylie, Mrs. M. J. B., N. Y., 1891, L.
 Yeager, R. L., Mo., 1896, A.
 Yerby, John D., Ala., 1895, A.
 Young, Geo. C., Utah, 1892, A.
 Young, J. B., Iowa, 1896, A.
 Young, J. S., Colo., 1895, A.
 Young, Robert G., Ill., 1899, A.
 Zillafro, Margaret C., Pa., 1896, A.
 Zimmerman, Chas. F. A., Wis., 1895, A.

**STATEMENT OF SECURITIES AND BONDS BELONGING TO THE
PERMANENT FUND OF THE NATIONAL EDUCATIONAL ASSOCIATION, JUNE 30, 1896**

KANSAS SCHOOL, COUNTY AND MUNICIPAL BONDS.

County.	No. Sch. District.	Amount.	Rate of Interest.	Interest Payable.	Bond due.
			per cent.		
Barton	66	\$330	6	Jan. & July	Jan. 1900
Clark	42	500	6	Jan. & July	July 1, 1901
Clark	60	100	6	Jan. & July	Jan. 1, 1901
Cowley	143	360	6	Jan. & July	July, 1900
					\$100 Jan. 1896,
Crawford	120	400	6	Jan. & July	\$100 Jan. 1898,
					\$200 Jan. 1902
Decatur	35	440	6	Jan. & July	July, 1901
Ellis	14	800	6	Jan. & July	July, 1900
Ellis	18	350	6	Jan. & July	July, 1896
Ellis	44	800	6	Jan. & July	July, 1900
Garfield	24	800	6	Jan. & July	Jan. 1910
Greenwood	2	400	6	Jan. & July	\$200 July, 1896
					\$200 July, 1899
Logan	2	500	6	Jan. & July	July, 1896
Mitchell	43	500	6	Jan. & July	July, 1895 (past due
Mitchell	106	475	6	Jan. & July	Jan. 1902
Ness	41	400	6	Jan. & July	\$200 July, 1898
					\$200 1902
Ness	70	500	6	Jan. & July	July, 1903
Norton	95	200	6	Jan. & July	July, 1902
Osborne	52	310	6	Jan. & July	July, 1899
Phillips	63	272	6	Jan. & July	Jan. 1900
Pratt	36	500	6	Jan. & July	July, 1901
Reno	51	500	6	Jan. & July	July, 1901
Reno	51	500	6	Jan. & July	July, 1902
Reno	119	300	6	Jan. & July	Jan. 1897
Reno	129	300	6	Jan. & July	Jan. 1902
Scott	6	400	6	Jan. & July	July 1, 1897
Sheridan	22	100	6	Jan. & July	Jan. 1, 1902
Smith	109	400	6	Jan. & July	Apr. 1, 1902
Sumner	177	300	6	Jan. & July	July, 1896
Washington	136	500	6	Jan. & July	July, 1898

County.	Kind of Bond.	Bond Nos.	Amount	Rate of Interest.	Interest Payable.	Bond due.
				per cent.		
Cloud	City of Concordia. Investment made Sept. 24, 1895.....	35-36-37 38-39-40	\$3,000	6	Jan. & July	July 1, 1918
Douglas	Eudora Township	5-6-7-8	1,000	6	Feb. & Aug.	No. 5 & 6 Feb. 1896 No. 7 & 8 Feb. 1897
Douglas	Eudora City	4-5-6-7-8-9-10 11-12-13-14-15 16-17-18-19-20	1,700	6	March.	One due each year, Mch. 1.
Grant	County	47-48	2,000	6	Jan. & July	Feb., 1920
Hodgeman	County	1	1,000	6	Jan. & July	July 1, 1919
Kingman	Aid Bonds	1-2-3-4-5-6-7	7,000	6	Jan. 31 & July	Aug. 31, 1919
Lane	County	11-12-13	3,000	6	Jan. & July	July, 1918
Marion	City of Marion	1	1,000	5½	Mch. & Sept.	Mch. 1, 1900
McPherson	Sharp's Creek Township. Investment made Dec. 12, 1895.....	1	1,000	6	Jan. & July	Sept. 1, 1916
Montgomery	Caney Township	2	1,000	6	Apr. & Oct.	Oct. 1, 1916
Reno	City Bonds, So. Hutchinson	1-2	1,000	7	Feb. & Aug.	April, 1908
Seward Co.	With Bentley & Hatfield, Wichita, Kas.		1,000	for collection.		

MISCELLANEOUS.

County.	Amount.	Rate of Interest.	Interest Payable.	Bond due.
		per cent.		
Jackson, Kansas City, Mo.	\$2,000	5	Jan. & July	July 1, 1901
Cook, Chicago, Ill.	2,000	6	Mch. & Sept.	March 10, 1898
Noblesville, Ind.	5,000	5		July 1, 1900
De Kalb, Ill.	3,000	5	Apr. 1	Apr. 1, 1900
Cook, Village of Morgan Park, Ill.	3,500	5	Mch. & Sept.	Sept., 1905
Providence, Real Estate. 1st Mortgage	3,000	6	May & Nov.	
	\$18,500			

RECAPITULATION.

Kansas Bonds	\$35,937
Miscellaneous Bonds	18,500
Total Investment.....	\$54,437

"The foregoing securities were examined at the Nassau Safety Deposit Vaults, New York City, Oct. 26, 1896, and we certify that it is a correct statement of the investments belonging to the Permanent Fund of the National Educational Association in the custody of H. S. Tarbell, Chairman of the Board of Trustees.

Signed { ALBERT G. LANE,
NICHOLAS MURRAY BUTLER,
J. ORMOND WILSON.

CLASSIFIED MEMBERSHIP BY STATES
IN THE
NATIONAL EDUCATIONAL ASSOCIATION
FOR THE YEAR 1896—(BUFFALO MEETING).

	Active Membership.				Associate Membership.	Total Membership.
	Life Direct-ors.	Life Mem-bers.	Active Members.	Total Active Member-ship.		
North Atlantic Division.						
Maine			4	4	3	7
New Hampshire		2	3	5	3	8
Vermont			2	2	12	14
Massachusetts	2	3	73	78	119	197
Rhode Island	1		17	18	17	35
Connecticut	1	1	10	12	31	43
New York	4	10	199	213	1,919	2,182
New Jersey		1	57	58	121	179
Pennsylvania	1	7	58	66	259	325
South Atlantic Division.						
Delaware			5	5	6	11
Maryland		1	10	11	12	23
District of Columbia	3	3	12	18	11	29
Virginia			5	5	16	21
West Virginia	1		14	15	37	52
North Carolina		1	5	6	8	14
South Carolina	1		3	4	27	31
Georgia		1	10	11	32	43
Florida			4	4	9	13
South Central Division.						
Kentucky		2	16	18	59	77
Tennessee	2	1	9	12	45	57
Alabama			17	17	42	59
Mississippi			6	6	19	25
Louisiana			7	7	18	25
Texas			11	11	88	99
Arkansas			8	8	55	63
North Central Division.						
Ohio	3	16	105	124	442	566
Indiana	1	3	41	45	205	250
Illinois	5	8	152	165	1,006	1,171
Michigan	2		40	42	547	589
Wisconsin		41	43	84	329	413
Iowa	1	4	47	52	526	578
Minnesota	1	2	44	47	256	303
Missouri	2	3	46	51	355	406
North Dakota			6	6	28	34
South Dakota			9	9	74	83
Nebraska		4	30	34	329	363
Kansas	3	18	39	60	265	325
Western Division.						
Montana		1	6	7	36	43
Wyoming			3	3	4	7
Colorado	1	1	49	51	126	177
New Mexico			5	5	11	16
Arizona			2	2	4	6
Utah			11	11	26	37
Nevada			2	2	3	5
Oklahoma			2	2	12	14
Indian Territory						
Idaho			3	3	7	10
Washington		2	5	7	9	16
Oregon	1		3	4	5	9
California	2	8	16	26	25	51
Alaska			1	1		1
Canada.			3	3	11	14
Hungary			1	1		1
Total Active Membership	38	144	1,282	1,464	7,609	9,073

RECORD OF MEMBERSHIP BY STATES
IN THE
NATIONAL EDUCATIONAL ASSOCIATION
FOR EACH YEAR FROM 1884-1896 INCLUSIVE.

Excepting for 1893, when no regular meeting was held. Underlined numbers show Membership from the State in which the Meeting for the year was held.

PLACE AND DATE OF MEETING.	Madison.	Saratoga.	Topeka.	Chicago.	San Francisco.	Nashville.	St. Paul.	Toronto.	Saratoga.	Asbury Park.	Denver.	Buffalo.	Total.	Average Mem- bership.
North Atlantic Division.	1884	1885	1886	1887	1888	1889	1890	1891	1892	1894	1895	1896	.....	.....
Maine	21	2	5	25	11	.....	32	30	10	5	24	7	172	14
New Hampshire	64	2	10	23	11	.....	32	9	5	7	27	8	202	17
Vermont	43	8	3	41	4	.....	40	4	20	4	13	14	194	16
Massachusetts	310	145	85	277	206	28	290	114	212	52	191	197	2,107	176
Rhode Island	50	13	13	29	30	4	31	42	23	12	55	35	337	28
Connecticut	40	18	23	36	48	4	31	18	53	13	26	43	363	30
New York	143	<u>169</u>	91	211	210	29	228	117	<u>611</u>	<u>326</u>	521	<u>2,132</u>	4,786	398
New Jersey	40	27	35	23	41	13	12	16	65	<u>889</u>	168	179	1,588	132
Pennsylvania	81	28	121	108	242	23	99	76	178	323	437	325	2,042	170
South Atlantic Division.														
Delaware	1	.....	4	.....	3	1	2	5	6	8	17	11	58	5
Maryland	5	1	10	8	17	3	7	13	49	45	53	23	234	20
District of Columbia	30	4	7	12	32	13	21	10	35	24	47	29	264	22
Virginia	6	3	3	2	18	12	2	8	2	24	36	21	139	12
West Virginia	15	2	3	8	6	6	27	49	20	37	49	52	274	23
North Carolina	3	4	.....	2	8	12	2	13	17	15	5	14	95	8
South Carolina	5	1	1	2	13	22	4	18	14	52	1	31	164	14
Georgia	11	1	2	10	16	43	23	31	163	64	62	43	469	39
Florida	1	.....	1	.....	16	7	4	3	2	19	13	66	6	6
South Central Division.														
Kentucky	33	2	8	151	22	114	39	57	42	128	176	77	849	71
Tennessee	12	6	5	62	83	<u>607</u>	97	124	57	124	66	57	1,300	108
Alabama	9	1	1	16	45	123	35	79	51	41	41	59	501	42
Mississippi	7	1	2	7	10	87	44	42	36	20	49	25	330	28
Louisiana	1	7	8	11	7	19	13	25	21	35	108	25	282	24
Texas	22	1	15	55	29	89	20	53	9	89	204	99	768	64
Arkansas	22	.....	8	67	12	29	12	34	33	25	84	63	389	32
North Central Division.														
Ohio	121	43	67	581	225	60	361	355	178	990	592	565	4,138	345
Indiana	54	15	46	418	71	89	206	149	65	258	321	250	1,942	162
Illinois	354	33	164	<u>1760</u>	222	204	625	666	214	871	1,495	1,174	7,772	647
Michigan	77	12	20	273	40	29	137	250	285	155	204	589	2,050	171
Wisconsin	<u>546</u>	18	18	486	57	28	443	222	72	143	188	413	2,654	221
Iowa	304	18	87	1,146	96	67	572	278	110	164	1,086	578	4,506	375
Minnesota	132	9	11	649	58	16	<u>933</u>	118	54	86	193	303	2,562	214
Missouri	46	11	73	625	133	68	249	320	169	435	1,113	406	3,668	305
North Dakota	23	1	5	149	8	7	99	32	16	8	28	34	.....	.....
South Dakota .....	.....	.....	.....	.....	.....	.....	109	31	20	9	78	83	740	62
Nebraska	39	5	27	634	40	10	147	220	126	127	742	363	2,480	207
Kansas	16	11	<u>190</u>	960	124	64	275	283	127	111	1,171	325	3,652	304
Western Division.														
Montana	3	1	1	9	4	5	37	24	9	3	15	43	154	13
Wyoming	1	2	2	8	8	.....	5	13	4	2	48	7	100	8
Colorado	12	2	11	40	100	8	56	114	59	58	<u>1,136</u>	177	1,782	148
New Mexico .....	.....	.....	.....	2	26	2	1	7	5	.....	26	16	85	7
Arizona .....	.....	.....	.....	1	45	1	1	.....	2	2	11	6	69	6
Utah .....	.....	1	3	4	127	.....	10	8	4	89	37	283	24	24
Nevada	1	.....	1	6	134	.....	1	.....	.....	.....	2	5	150	13
Oklahoma .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	58	14	76	25
Indian Territory	3	1	.....	1	8	6	1	3	4	1	23	.....	50	4
Idaho .....	.....	.....	.....	.....	12	.....	.....	.....	1	1	3	10	28	2
Washington	1	.....	1	3	27	1	6	18	1	2	6	16	82	7
Oregon	3	1	1	11	204	8	7	5	5	14	9	268	22
California	5	4	18	<u>4278</u>	13	8	5	10	1	53	51	4,446	371
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